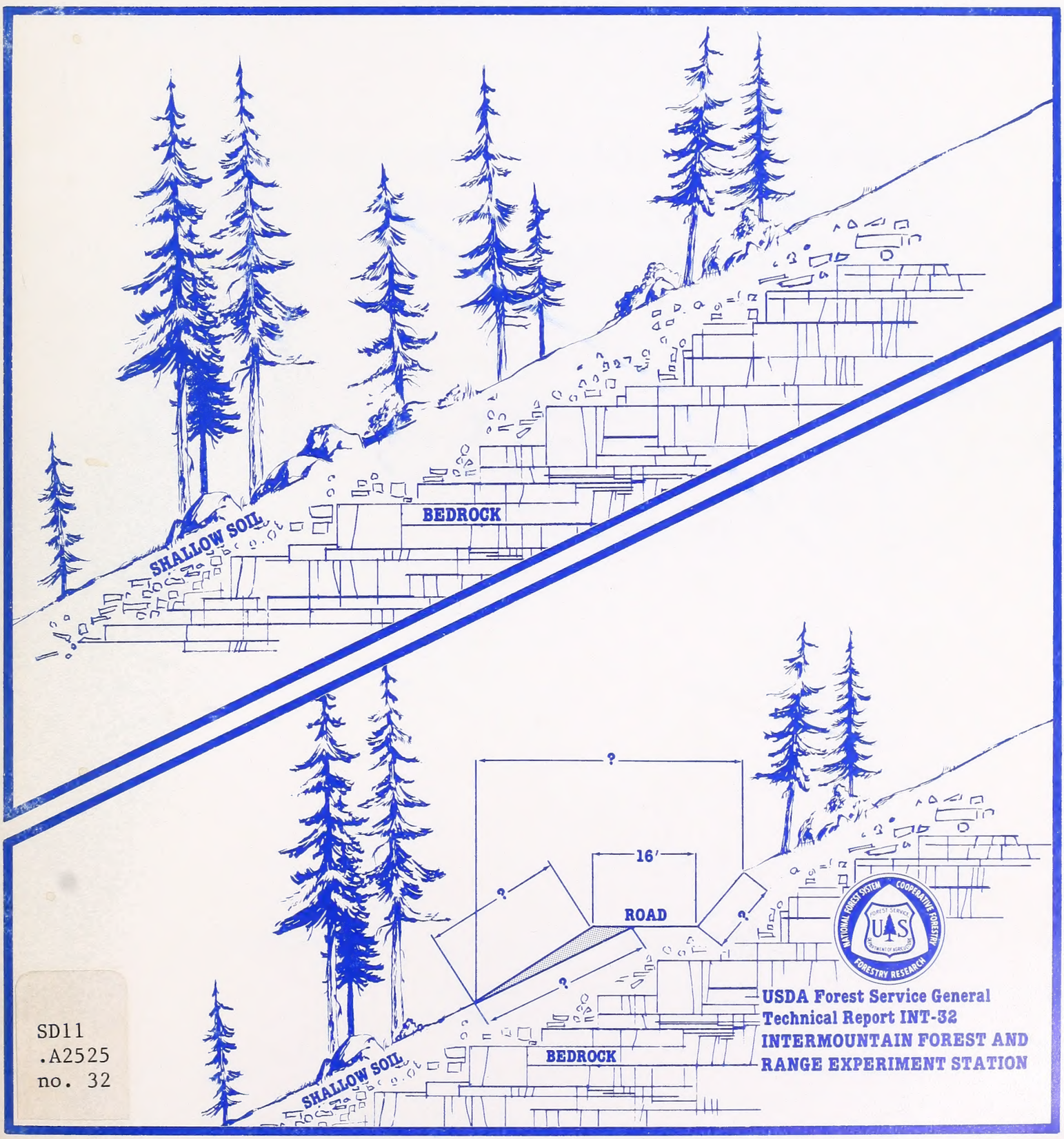
TABLES OF GEOMETRY FOR LOW-STANDARD ROADS FOR WATERSHED MANAGEMENT CONSIDERATIONS, SLOPE STAKING, AND END AREAS

Walter F. Megahan



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ABSTRACT

Tables were developed to provide various dimensions for low-standard roads built with a "balanced" construction technique. The information is intended to provide a means of evaluating potential watershed impacts of road construction and of helping to plan for appropriate corrective actions. Additional dimensions are provided to assist in slope staking and for estimating excavation volumes. The information has application in both the road location and design phases of the road construction process. The tables are for use in situations where low road costs preclude detailed engineering design or where engineering talents are simply unavailable.

INTRODUCTION

Thousands of miles of roads are built each year on private, State, and Federal forest lands. Much of this annual construction consists of low-standard roads. These are low-cost roads receiving little or no engineering design either because the low road cost precludes more detailed engineering design or simply because no engineering talents are available.

Unfortunately, any type of road construction creates a variety of site disturbances that tend to accelerate erosion, which in turn may increase downstream sedimentation (Anderson 1954; Fredriksen 1970; Haupt and Kidd 1965). Low standard roads are often particularly troublesome because of such factors as poor location and design and lack of erosion control measures. Numerous other researchers have documented the occurrence of increased sedimentation following road construction, especially in steeper terrain (Megahan and Kidd 1972; Reinhart and others 1963; Rice and Wallis 1962). Such effects have become more important in recent years because of the enactment of Federal and State laws to regulate pollution by sediments from diffuse sources including roads.

Most of the potential impact is caused by accelerated on-site erosion including both surface and mass erosion (landslides). Some possible causal factors include:

1. Removal or reduction of protective cover;

2. Destruction or impairment of natural soil structure and fertility;

3. Decreased infiltration rates on parts of the road;

4. Concentration of generated or intercepted water;

5. Interception of subsurface flow levels by the road cut slope;

6. Decreased shear strength, increased shear stress on cut and fill slopes, or both;

7. Increased slope gradients on cut and fill slopes.

The last three factors are a direct result of the fact that road construction alters the geometry of the hill slope.

The primary purpose of the road geometry tables presented here is to provide a means of estimating the extent of alteration of hill slope geometry before construction. Use of the tables makes it possible to evaluate potential watershed impacts and to plan appropriate corrective actions. Such questions as:

1. How much area is disturbed by road construction?

2. What is the area of the rainfall intercepting surface?

3. What is the area of fill and cut slopes needing stabilization treatment?

4. Will channel encroachment occur?

5. How much area is available to buffer sediment flow into a stream channel?

These and other questions can be answered if various dimensions of the road prism are known.

Additional road prism dimensions are included for individuals concerned with slope staking and end areas. This information is included for three reasons:

1. Slope staking is needed to guide operators during construction so that the proper road prism dimensions are obtained;

2. Some of the dimensions needed for slope staking are already available from the calculations dealing with watershed management considerations;

3. A commonly used reference table for slope stakes and end areas for minor roads (USDA Forest Service and USDI Bureau of Land Management 1967) is out of print and is becoming generally unavailable.

ROAD PRISM DIMENSIONS CONSIDERED

The road prism dimensions pertinent to watershed management considerations are illustrated in figure 1. A description of the dimensions and some possible uses are:

1. SF = The slope distance from the grade daylight stake to the toe of the fill slope--

   a. Provides a means of determining possible channel encroachment.

   b. Defines the lower extremity of disturbed soil if channel encroachment does not occur; the distance from this point to the stream channel is the buffer strip that is available to trap eroded material. This information, coupled with guides for establishing the width of buffer strip (Ohlander 1976; Packer 1967; Trimble and Sartz 1957), provides a means of reducing sediment delivery to stream channels.

   c. Indicates the hazard for "sliver" fills. A sliver fill is a fill constructed on a hill slope where the hill slope gradient approaches or exceeds the gradient of the road fill slope. When this happens no fill embankment can form; instead, the fill material flows down the hill in a long sliver. This tendency is apparent in the tables; as the hill slope gradients approach the fill slope gradient of 1-1/2:1 (66-2/3 percent), the values for SF increase rapidly indicating increasing probability of sliver fills. The tables do not exceed 66 percent because the values for SF go to infinity beyond this point.

2. SC = Slope distance from the grade daylight stake to the top of the cut slope--defines the limit of upslope disturbance and possible uphill encroachment (for example, into upslope landslide areas).

3. WH = Total width of disturbance projected to a horizontal plane--defines the total width of the rainfall intercepting surface.

4. WS = Total width of disturbance along the hill slope--defines the total width of the disturbed surface available for erosion.

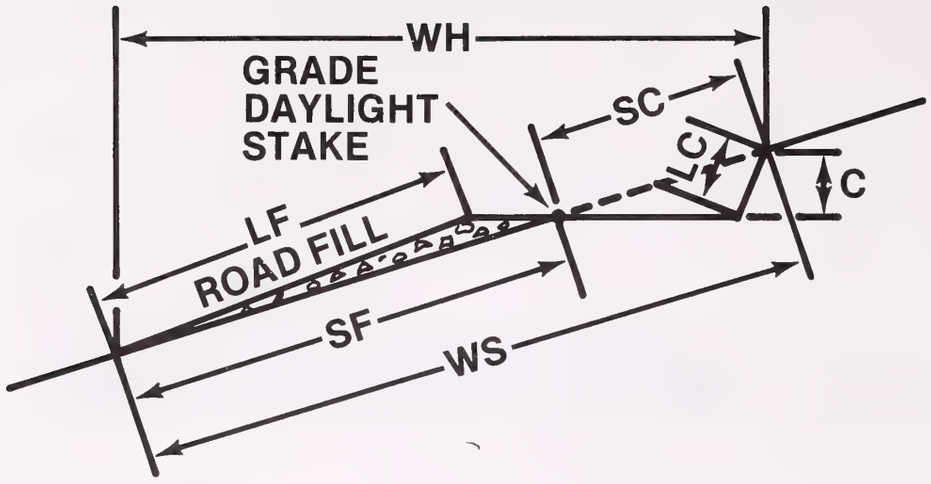

Figure 1.--Road prism dimensions for watershed management considerations.

5. LF = Length of the fill slope--

   a. Useful for determining slope stabilization needs.

   b. Often in combination with slope gradient is a useful parameter for estimating erosion by various procedures.

6. LC = Length of the cut slope--same uses as the length of fill slope.

7. C = Height of the cut, coupled with some knowledge of subsurface conditions (for example, soil depth or ground water depth), helps--

   a. To indicate the potential for intercepting subsurface flow zones,

   b. To red flag possible slope stability problems.

The road prism dimensions for slope staking and end areas are shown in figure 2. Descriptions and uses of the dimensions are:

1. SF = The slope distance from the grade daylight stake to the fill stake--determines the location of the fill stake.

2. SC = The slope distance from the grade daylight stake to the cut stake--determines the location of the cut stake.

3. C = The height of the cut--to be marked on the cut stake.

4. HC = The horizontal distance from the cut stake to the road centerline--to be marked on the cut stake.

5. F = The height of the fill--to be marked on the fill stake.

6. HF = The horizontal distance from the fill stake to the road centerline--to be marked on the fill stake.

7. A = End area, in square feet, of the cut section--to obtain cubic yardage per 100 feet of road length by multiplying average end area by 3.7.

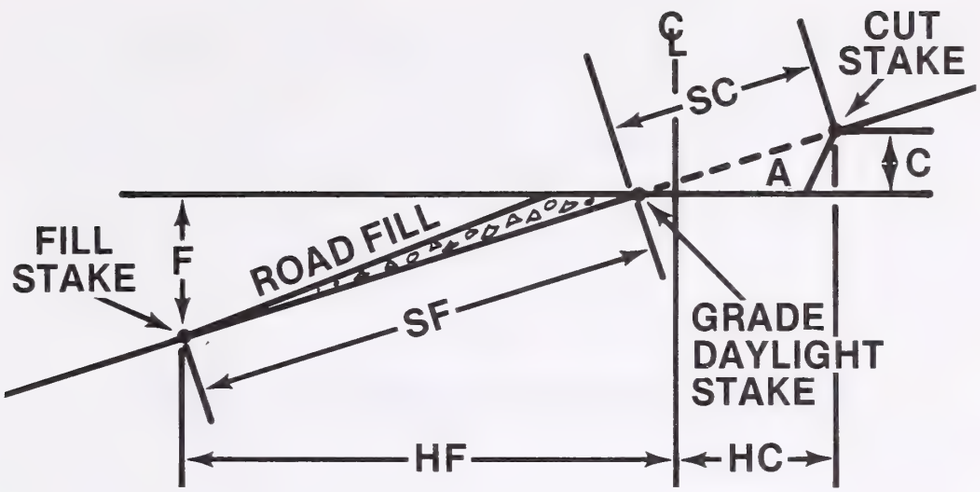

Figure 2.--Road prism dimensions for slope stakes and end areas.

DEVELOPMENT OF THE TABLES

The road geometry tables in the appendix were developed using hill slope gradient (θ_s), road width (W), and the gradient of the road cut (θ_c) and fill slopes (θ_f) as input variables (fig. 3).

Normally, these dimensions are known or can be closely estimated for a given situation. The most commonly used fill slope gradient on forest roads is 1.5 to 1; in the interest of economy, this is the only fill slope gradient given in the tables. Cut slope gradients of 1.5 to 1, 1.0 to 1, 0.75 to 1, 0.50 to 1, 0.25 to 1, 0.10 to 1, and vertical are presented. Hill slope gradients ranging from 10 to 66 percent are given in increments of 2 percent. Finally, road widths varying from 8 to 20 feet are given by 1-foot increments. The mathematical derivations are presented in the appendix so users can develop other combinations as needed. Calculations were programed in FORTRAN for a CDC 6600 computer; the program is available for use elsewhere.

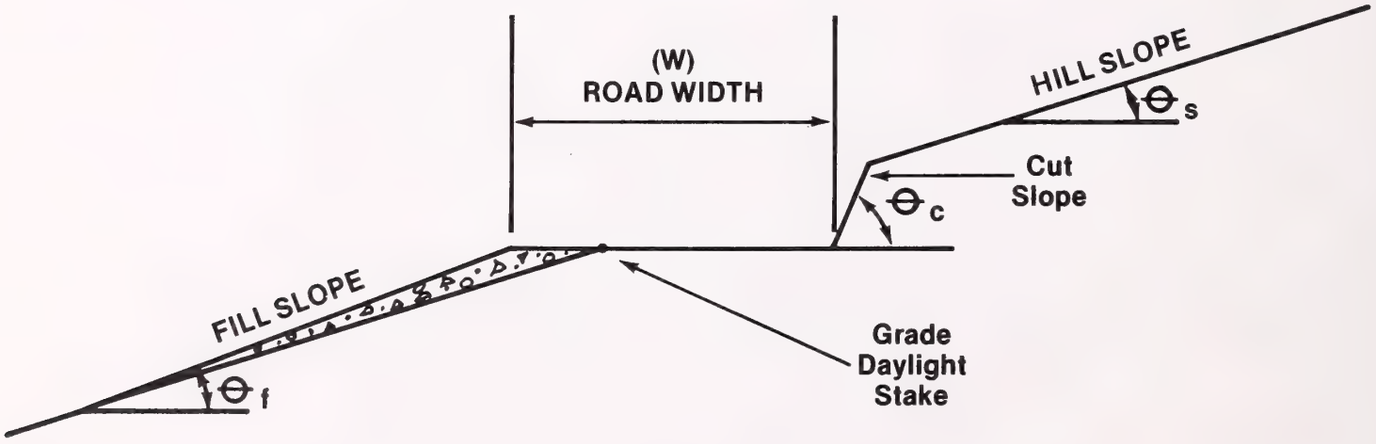

Figure 3.--Dimensions required for road geometry tables.

The following assumptions were made in the development of the tables:

1. *A "balanced" cut and fill is used for construction.* Low-standard roads are commonly built by using balanced construction. This requires that the volume of material cut out of the hillside be equal to the volume of material used to construct the fill portion of the road. This type of construction is commensurate with low road standards because it minimizes excavation costs and because the low road standards permit fitting the road closely to the terrain (a requirement if balanced construction is to be used). Obviously, for economic reasons balanced construction can be just as desirable for roads built to higher standards. Unfortunately, this is not often possible except in areas of fairly uniform terrain. Elsewhere, horizontal and vertical irregularities prevent balanced construction and the use of these tables.

2. *On the average, the fill section contains 15 percent less area than the cut section.* This adjustment factor is necessary because many times variations in topography, type of materials, construction methods, or other situations prevent truly balanced construction. There can be more or less area in the fill slope than in the cut slope; however, there is generally less area in the fill slope because of problems during construction, such as downslope losses of materials. A shrinkage factor of 15 percent was assumed as an average value most applicable for low-standard roads. The adjustment factor is introduced in step 6 of the appendix as a value K; this value can be varied if necessary for other situations.

3. *Slope gradients for cut slopes, fill slopes, and the hillside are relatively uniform.* With proper construction, cut and fill slope gradients should be uniform. If the hillside gradient is relatively uniform, an average gradient for the section of slope in question may be used.

4. *The road surface is horizontal.* Many times roadbeds are insloped or outsloped to reduce erosion. However, the amount of slope is usually only a few percent and should cause only minor inaccuracies.

5. *Cut and fill slope gradients are constructed as planned.* Lack of compliance to planned cut and fill slope gradients can cause large errors in road prism dimensions. Obviously, this can only be prevented by careful adherence to plans during construction. Slope staking should help the operator meet specifications. It should be pointed out that fill slopes constructed by sidecasting (common on low-standard roads) may have a steeper gradient than 1.5 to 1 immediately after construction. Consequently the fill slope will not extend as far downslope as expected. However, over time, such an oversteepened fill slope tends to adjust to a 1.5 to 1 gradient and so meet the planned dimensions.

Except for situations where "balanced" construction is not used or where large irregularities in the hill slope gradients occur, minor deviations from the five assumptions above should cause only minor inaccuracies in road prism dimensions. The tables are only applicable to balanced construction and should only be used for this purpose. Where minor irregularities in the hill slope gradient occur, an average slope may be used without introducing large errors. However, as hill slope irregularities become large or as gradients approach 66 percent, large errors can be introduced. In this case, use good judgment to estimate what effect the break in hill slope gradient will have or use more intensive engineering design procedures to accurately cross-section the slope in question.

USE OF THE TABLES

Three factors must be known to use the tables: (1) road width, (2) cut slope gradient, and (3) hill slope gradient. A fourth factor, the fill slope gradient, is assumed to be 1.5 to 1 for all situations. A basic principle for minimizing watershed impacts from road construction is to minimize the amount of soil disturbance. This can be accomplished by selecting the narrowest road width possible and the steepest cut slope possible. However, selection must be tempered by user needs in the case of road width and by slope-stability requirements in the case of cut slope gradients. Generally, selection of road width is readily apparent depending on proposed road use; selection of cut slope gradients may require consultation with local expertise familiar with slope-stability problems in the area. The hill slope gradients are measured on site and used subject to the constraints discussed above.

Use of the tables also requires that a route location be available or assumed to serve as a reference point for measurements. This location is assumed to be a gradeline and is shown as the grade daylight stake on figures 1 and 2. Many times, the route location is established and the tables are used for slope staking and to help design stabilization needs. However, the tables are also helpful in selecting optimum route locations in areas where watershed management considerations are important. In this situation, a gradeline location is assumed and the road prism dimensions are determined. These are then compared to the actual conditions on the ground to appraise potential watershed impacts. Oftentimes, severe impacts become apparent that require a change in road location.

All dimensions in the tables are in feet except the end area, which is in square feet. The tables are suitable for roads that have additional width requirements for a berm or ditch. Simply add the additional horizontal distance caused by the berm or ditch to the basic road width and use the total width to enter the tables.

An example: watershed management considerations

As indicated above, the tables have a variety of potential uses for watershed management purposes. An example follows:

Given:
1. A 200-foot-long section of road located near an important fishing stream
2. Road width = 10 feet
3. Cut slope gradient = 1 to 1
4. Hill slope gradient = 50 percent
5. Slope distance from the grade daylight stake to the stream = 50 feet

Find: How can watershed impacts on the stream be minimized?

The first question would probably be "Will the road fill encroach on the stream?" Referring to the tables, we find that the slope distance from the grade daylight stake to the toe of the fill slope (SF on fig. 1) will be about 18 feet; so direct stream encroachment will not occur. However, this slope distance allows only 32 feet between the road fill and the stream, a distance that is judged to be inadequate after reference to guides for size of buffer area (Ohlander 1976; Packer 1967; Trimble and Sartz 1957). It is not practical to change the road location, but two alternatives are possible: (1) Improve the efficiency of the buffer strip by adding materials to help store eroded material en route to the stream; or (2) control the erosion at the source by intensive

erosion-control measures. This particular stream is very valuable; so both courses of action are taken. The decision is made to augment sediment storage with the use of logging slash lopped and placed below the fill slope to assure close contact with the soil surface. On-site erosion control consists of mulching both cut and fill slopes and transplanting trees into the fill slope to help protect against mass erosion. Reference to the tables shows that the fill slope will be about 15 feet long (LF on fig. 1) and the cut slope will be about 9 feet long (LC on fig. 1). The total of these two figures times the length of road involved (200 feet in this case) indicates a need for mulching 4,800 square feet or about 0.1 acre. Planting trees at a 4- by 4-foot spacing on the 15- by 200-foot fill slope will require about 190 transplants.

An example: slope staking

Referring to figure 2, slope staking proceeds as follows using stations located at 100-foot intervals along the road. (If slope staking efforts must be curtailed, consider installing cut stakes only.)

1. Locate the position of the cut and fill stakes by determining the slope distance from the grade daylight stake to the slope stakes (SC for the cut stake and SF for the fill stake).
2. Determine the amount of vertical cut (C) or fill (F); and record on the cut and fill stakes, respectively.

3. Determine the horizontal distance from the slope stakes to the road centerline (HC for the cut stake and HF for the fill stake). Record on the cut and fill stakes, respectively.

4. Record the above dimensions along with the gradients of the cut and fill on the stakes. The cut and fill stakes for the hypothetical road dimensions given in the example above would appear as shown in figure 4.

As a point of interest, reference to the end area dimensions in the tables shows that the road section presented in the example on page 8 will require excavation of about 135 cubic yards of material.

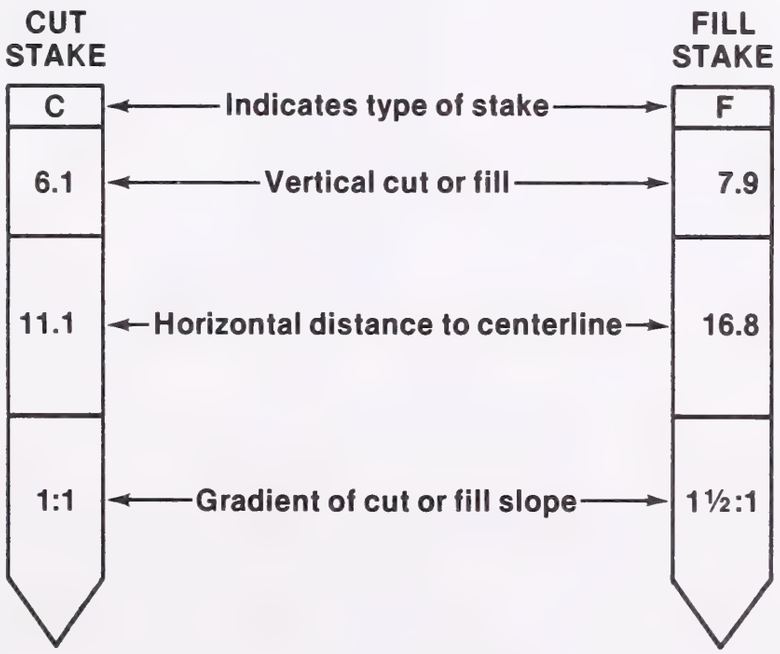

Figure 4.--Dimensions for marking cut and fill stakes.

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APPENDIX

Procedure to calculate road prism geometry given the dimensions in figure 3:

W = Width of road (feet)

θ_c = Angle of cut slope (degrees)

θ_f = Angle of fill slope (degrees)

θ_s = Angle of hill slope (degrees)

1. Calculate horizontal distance from gradeline to top of cut slope per foot of cut width (C_h), where cut width is the distance from the grade daylight stake to the toe of the cut slope:

$$C_h = \frac{\text{Tan } \theta_c}{\text{Tan } \theta_c - \text{Tan } \theta_s}$$

2. Calculate slope distance from gradeline to top of cut slope per foot of cut width (C_s):

$$C_s = \frac{C_h}{\text{Cos } \theta_s}$$

3. Calculate horizontal distance from gradeline to bottom of fill slope per foot of fill width (F_h), where fill width is the distance from the grade daylight stake to the top of the fill slope:

$$F_h = \frac{\text{Tan } \theta_f}{\text{Tan } \theta_f - \text{Tan } \theta_s}$$

4. Calculate slope distance from gradeline to bottom of fill slope per foot of fill width (F_s):

$$F_s = \frac{F_h}{\text{Cos } \theta_s}$$

5. Calculate the end area of the cut section for a unit cut width of 1 foot (A')

$$A' = 0.5 * C_s * \text{Sin } \theta_s$$

6. Assuming an equal area for the fill section times a correction factor (1+K) to account for shrinkage during construction, calculate the width of the fill corresponding to the unit width of the cut (W_f'). An average 15 percent shrinkage loss was assumed for the tables; so a value of -0.15 was assigned to K in the development of these tables. Other K values can be applied as needed:

$$W_{f'} = \left[\frac{(1+K) * C_s}{F_s}\right]^{0.5} = \left[\frac{(0.85) * C_s}{F_s}\right]^{0.5}$$

7. Calculate the total cut width (B):

$$B = \frac{W}{1.0 + W_f'}$$

8. Calculate the total fill width (W_f):

$$W_f = W - B$$

9. Calculate the horizontal distance from the grade daylight stake to the road centerline (D):

$$D = B-0.5 * W$$

10. Calculate the horizontal distance from the centerline to the cut stake (HC):

$$HC = C_h * B-D$$

11. Calculate the horizontal distance from the centerline to the fill stake (HF):

$$HF = F_h * W_f + D$$

12. Calculate slope distance from the gradeline to the toe of the fill (SF):

$$SF = F_s * W_f$$

13. Calculate slope distance from the gradeline to the top of the cut (SC):

$$SC = C_s * B$$

14. Calculate the total horizontal distance disturbed (WH):

$$WH = F_h * W_f + C_h * B$$

15. Calculate the total slope distance disturbed (WS):

$$WS = SF + SC$$

16. Calculate length of fill slope (LF):

$$LF = \frac{W_f * (F_h - 1)}{\text{Cos } \theta_f}$$

17. Calculate length of cut slope (LC):

$$LC = \frac{B * (C_h - 1)}{\text{Cos } \theta_c}$$

18. Calculate end area (A):

$$A = A' * B^2$$

19. Calculate cut height (C):

$$C = \text{Sin } \theta_s * SC$$

20. Calculate fill height (F):

$$F = \text{Sin } \theta_s * SF$$

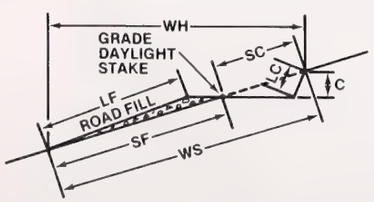
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 8 FEET

CUT SLOPE = VERTICAL

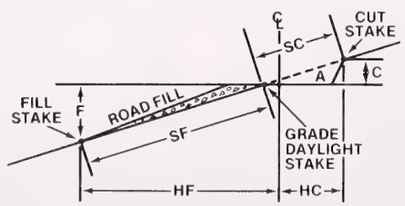
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	4.3	4.3	8.6	8.7	.8	.4	.4	4.0	.4	4.6	.9
12	4.5	4.4	8.8	8.9	1.0	.5	.5	4.0	.5	4.8	1.1
14	4.6	4.4	9.0	9.0	1.2	.6	.6	4.0	.6	5.0	1.4
16	4.8	4.5	9.1	9.2	1.4	.7	.7	4.0	.8	5.1	1.6
18	4.9	4.5	9.3	9.5	1.6	.8	.8	4.0	.9	5.3	1.8
20	5.1	4.6	9.5	9.7	1.8	.9	.9	4.0	1.0	5.5	2.0
22	5.3	4.7	9.7	9.9	2.0	1.0	1.0	4.0	1.1	5.7	2.3
24	5.5	4.7	9.9	10.2	2.3	1.1	1.1	4.0	1.3	5.9	2.5
26	5.7	4.8	10.1	10.5	2.6	1.2	1.2	4.0	1.4	6.1	2.8
28	5.9	4.9	10.4	10.8	2.9	1.3	1.3	4.0	1.6	6.4	3.1
30	6.2	5.0	10.7	11.1	3.2	1.4	1.4	4.0	1.8	6.7	3.4
32	6.5	5.0	10.9	11.5	3.5	1.5	1.5	4.0	2.0	6.9	3.7
34	6.8	5.1	11.3	11.9	3.9	1.7	1.7	4.0	2.2	7.3	4.0
36	7.1	5.2	11.6	12.3	4.3	1.8	1.8	4.0	2.4	7.6	4.4
38	7.5	5.3	12.0	12.8	4.8	1.9	1.9	4.0	2.7	8.0	4.7
40	7.9	5.4	12.4	13.4	5.3	2.0	2.0	4.0	2.9	8.4	5.1
42	8.4	5.6	12.9	14.0	5.9	2.2	2.2	4.0	3.3	8.9	5.5
44	9.0	5.7	13.4	14.7	6.5	2.3	2.3	4.0	3.6	9.4	6.0
46	9.6	5.8	14.0	15.5	7.3	2.4	2.4	4.0	4.0	10.0	6.4
48	10.4	6.0	14.7	16.4	8.1	2.6	2.6	4.0	4.5	10.7	6.9
50	11.3	6.1	15.6	17.4	9.1	2.7	2.7	4.0	5.0	11.6	7.5
52	12.4	6.3	16.6	18.7	10.3	2.9	2.9	4.0	5.7	12.6	8.1
54	13.7	6.5	17.8	20.2	11.8	3.1	3.1	4.0	6.5	13.8	8.8
56	15.4	6.7	19.3	22.1	13.6	3.3	3.3	4.0	7.5	15.3	9.6
58	17.7	6.9	21.4	24.7	16.1	3.5	3.5	4.0	8.9	17.4	10.5
60	21.1	7.2	24.3	28.3	19.5	3.7	3.7	4.0	10.8	20.3	11.5
62	26.4	7.6	28.8	33.9	25.0	4.0	4.0	4.0	13.9	24.8	12.8
64	37.0	8.0	37.9	45.0	35.9	4.3	4.3	4.0	19.9	33.9	14.6
66	80.9	8.8	74.9	89.7	80.3	4.8	4.8	4.0	44.6	70.9	17.7

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO ℄.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO ℄.
A = END AREA OF CUT - SQ. FT.

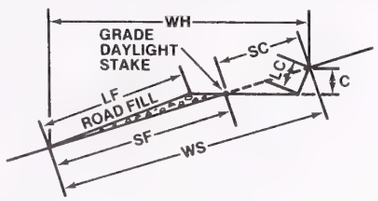
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 8 FEET

CUT SLOPE = .10 TO 1

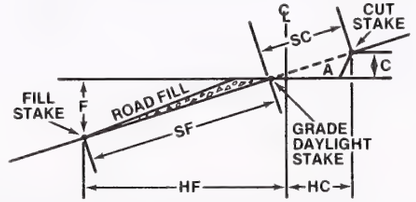
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	4.4	4.4	8.7	8.7	.8	.4	.4	4.0	.4	4.7	.9
12	4.5	4.4	8.9	8.9	1.0	.5	.5	4.1	.5	4.8	1.1
14	4.6	4.5	9.0	9.1	1.2	.6	.6	4.1	.6	5.0	1.4
16	4.8	4.5	9.2	9.3	1.4	.7	.7	4.1	.8	5.1	1.6
18	4.9	4.6	9.4	9.5	1.6	.8	.8	4.1	.9	5.3	1.8
20	5.1	4.7	9.6	9.8	1.8	.9	.9	4.1	1.0	5.5	2.1
22	5.3	4.8	9.8	10.0	2.0	1.0	1.0	4.1	1.1	5.7	2.3
24	5.5	4.8	10.0	10.3	2.3	1.1	1.1	4.1	1.3	5.9	2.6
26	5.7	4.9	10.3	10.6	2.6	1.2	1.2	4.1	1.4	6.2	2.9
28	6.0	5.0	10.5	10.9	2.9	1.4	1.3	4.1	1.6	6.4	3.1
30	6.2	5.1	10.8	11.3	3.2	1.5	1.5	4.1	1.8	6.7	3.4
32	6.5	5.2	11.1	11.7	3.6	1.6	1.6	4.2	2.0	7.0	3.8
34	6.8	5.3	11.5	12.1	4.0	1.7	1.7	4.2	2.2	7.3	4.1
36	7.2	5.4	11.8	12.6	4.4	1.8	1.8	4.2	2.4	7.7	4.5
38	7.6	5.5	12.2	13.1	4.9	2.0	2.0	4.2	2.7	8.0	4.8
40	8.0	5.6	12.7	13.7	5.4	2.1	2.1	4.2	3.0	8.5	5.2
42	8.5	5.8	13.2	14.3	6.0	2.2	2.2	4.2	3.3	9.0	5.7
44	9.1	5.9	13.7	15.0	6.6	2.4	2.4	4.2	3.7	9.5	6.1
46	9.8	6.1	14.4	15.8	7.4	2.5	2.5	4.3	4.1	10.1	6.6
48	10.6	6.2	15.1	16.8	8.2	2.7	2.7	4.3	4.6	10.9	7.2
50	11.5	6.4	16.0	17.9	9.3	2.9	2.9	4.3	5.1	11.7	7.8
52	12.6	6.6	17.0	19.2	10.5	3.1	3.0	4.3	5.8	12.7	8.4
54	14.0	6.8	18.3	20.8	12.0	3.2	3.2	4.3	6.6	14.0	9.1
56	15.8	7.0	19.9	22.8	13.9	3.5	3.4	4.3	7.7	15.6	10.0
58	18.1	7.3	22.0	25.5	16.4	3.7	3.7	4.4	9.1	17.7	10.9
60	21.6	7.6	25.0	29.2	20.0	3.9	3.9	4.4	11.1	20.6	12.1
62	27.1	8.0	29.8	35.1	25.7	4.2	4.2	4.4	14.3	25.4	13.5
64	38.0	8.5	39.2	46.5	36.9	4.6	4.6	4.5	20.5	34.7	15.4
66	83.5	9.4	77.5	92.8	82.9	5.2	5.2	4.5	46.0	73.0	18.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

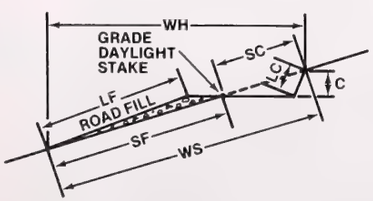
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 8 FEET

CUT SLOPE = .25 TO 1

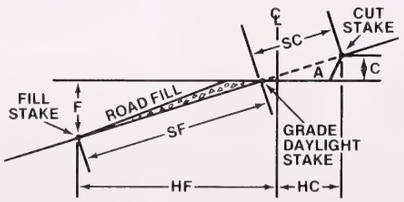
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	4.4	4.4	8.8	8.8	.8	.5	.4	4.1	.4	4.7	.9
12	4.5	4.5	8.9	9.0	1.0	.6	.5	4.1	.5	4.8	1.2
14	4.7	4.6	9.1	9.2	1.2	.7	.6	4.2	.6	5.0	1.4
16	4.8	4.6	9.3	9.4	1.4	.8	.7	4.2	.8	5.1	1.6
18	5.0	4.7	9.5	9.7	1.6	.9	.8	4.2	.9	5.3	1.8
20	5.1	4.8	9.7	9.9	1.8	1.0	.9	4.2	1.0	5.5	2.1
22	5.3	4.9	10.0	10.2	2.1	1.1	1.0	4.3	1.1	5.7	2.4
24	5.6	5.0	10.2	10.5	2.3	1.2	1.2	4.3	1.3	5.9	2.6
26	5.8	5.1	10.5	10.9	2.6	1.3	1.3	4.3	1.5	6.2	2.9
28	6.0	5.2	10.8	11.2	2.9	1.4	1.4	4.3	1.6	6.4	3.2
30	6.3	5.3	11.1	11.6	3.3	1.6	1.5	4.4	1.8	6.7	3.5
32	6.6	5.4	11.4	12.0	3.6	1.7	1.6	4.4	2.0	7.0	3.9
34	6.9	5.5	11.8	12.5	4.0	1.8	1.8	4.4	2.2	7.4	4.2
36	7.3	5.6	12.2	13.0	4.5	2.0	1.9	4.5	2.5	7.7	4.6
38	7.7	5.8	12.6	13.5	5.0	2.1	2.1	4.5	2.7	8.1	5.0
40	8.2	5.9	13.1	14.1	5.5	2.3	2.2	4.6	3.0	8.6	5.5
42	8.7	6.1	13.7	14.8	6.1	2.4	2.4	4.6	3.4	9.1	5.9
44	9.3	6.3	14.3	15.6	6.8	2.6	2.5	4.6	3.8	9.6	6.4
46	10.0	6.4	15.0	16.5	7.6	2.8	2.7	4.7	4.2	10.3	7.0
48	10.8	6.6	15.8	17.5	8.5	3.0	2.9	4.7	4.7	11.0	7.6
50	11.8	6.8	16.7	18.7	9.5	3.2	3.1	4.8	5.3	11.9	8.2
52	13.0	7.1	17.8	20.1	10.8	3.4	3.3	4.8	6.0	13.0	8.9
54	14.4	7.3	19.2	21.8	12.4	3.6	3.5	4.9	6.9	14.3	9.7
56	16.3	7.6	20.9	23.9	14.4	3.8	3.7	4.9	8.0	15.9	10.7
58	18.8	8.0	23.2	26.8	17.0	4.1	4.0	5.0	9.4	18.2	11.7
60	22.4	8.3	26.4	30.8	20.8	4.4	4.3	5.1	11.5	21.3	13.0
62	28.2	8.8	31.4	37.0	26.8	4.8	4.6	5.2	14.9	26.3	14.7
64	39.8	9.4	41.4	49.2	38.6	5.2	5.1	5.3	21.4	36.2	16.9
66	87.8	10.4	82.0	98.3	87.2	5.9	5.7	5.4	48.4	76.6	20.9

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

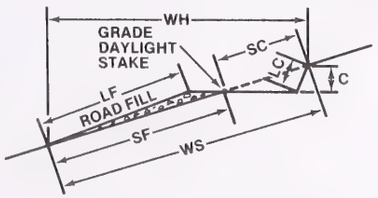
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 8 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	4.4	4.5	8.9	8.9	.8	.5	.4	4.2	.4	4.7	1.0
12	4.5	4.6	9.1	9.2	1.0	.6	.5	4.3	.5	4.8	1.2
14	4.7	4.7	9.3	9.4	1.2	.7	.7	4.3	.7	5.0	1.4
16	4.9	4.8	9.5	9.7	1.4	.8	.8	4.4	.8	5.2	1.6
18	5.0	4.9	9.8	9.9	1.6	1.0	.9	4.4	.9	5.3	1.9
20	5.2	5.0	10.0	10.2	1.8	1.1	1.0	4.5	1.0	5.5	2.2
22	5.4	5.1	10.3	10.5	2.1	1.2	1.1	4.5	1.2	5.8	2.4
24	5.7	5.2	10.6	10.9	2.4	1.4	1.2	4.6	1.3	6.0	2.7
26	5.9	5.4	10.9	11.3	2.7	1.5	1.3	4.7	1.5	6.2	3.0
28	6.2	5.5	11.2	11.7	3.0	1.7	1.5	4.7	1.7	6.5	3.4
30	6.5	5.6	11.6	12.1	3.3	1.8	1.6	4.8	1.9	6.8	3.7
32	6.8	5.8	12.0	12.6	3.7	2.0	1.8	4.9	2.1	7.1	4.1
34	7.2	6.0	12.4	13.1	4.1	2.1	1.9	5.0	2.3	7.5	4.5
36	7.6	6.1	12.9	13.7	4.6	2.3	2.1	5.0	2.6	7.8	4.9
38	8.0	6.3	13.4	14.3	5.1	2.5	2.2	5.1	2.8	8.3	5.4
40	8.5	6.5	13.9	15.0	5.7	2.7	2.4	5.2	3.2	8.7	5.9
42	9.1	6.7	14.6	15.8	6.3	2.9	2.6	5.3	3.5	9.3	6.4
44	9.7	7.0	15.3	16.7	7.1	3.1	2.8	5.4	3.9	9.9	7.0
46	10.5	7.2	16.1	17.7	7.9	3.4	3.0	5.5	4.4	10.6	7.6
48	11.4	7.5	17.0	18.9	8.9	3.6	3.2	5.6	4.9	11.4	8.3
50	12.4	7.8	18.1	20.2	10.0	3.9	3.5	5.7	5.6	12.3	9.1
52	13.7	8.1	19.4	21.8	11.4	4.2	3.7	5.9	6.3	13.5	10.0
54	15.3	8.5	20.9	23.8	13.1	4.5	4.0	6.0	7.3	14.9	10.9
56	17.4	8.9	22.9	26.2	15.3	4.8	4.3	6.2	8.5	16.7	12.1
58	20.1	9.3	25.5	29.5	18.2	5.2	4.7	6.3	10.1	19.1	13.4
60	24.1	9.9	29.1	34.0	22.4	5.7	5.1	6.5	12.4	22.6	15.1
62	30.5	10.5	34.9	41.1	29.0	6.2	5.6	6.8	16.1	28.1	17.2
64	43.4	11.4	46.2	54.8	42.2	6.9	6.2	7.1	23.4	39.1	20.1
66	97.0	12.9	91.7	109.9	96.4	7.9	7.1	7.5	53.5	84.2	25.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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WH = TOT. WIDTH DISTURB. HOR.
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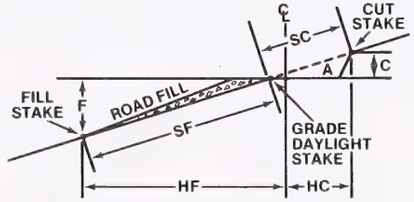
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

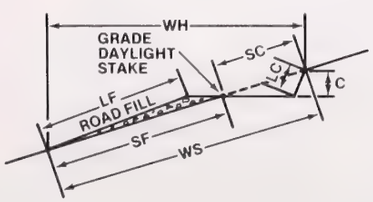
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 8 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	4.4	4.6	9.0	9.1	.8	.6	.5	4.3	.4	4.7	1.0
12	4.6	4.7	9.2	9.3	1.0	.7	.6	4.4	.5	4.8	1.2
14	4.7	4.8	9.5	9.6	1.2	.8	.7	4.5	.7	5.0	1.4
16	4.9	5.0	9.8	9.9	1.4	1.0	.8	4.6	.8	5.2	1.7
18	5.1	5.1	10.0	10.2	1.6	1.1	.9	4.7	.9	5.4	2.0
20	5.3	5.2	10.3	10.5	1.9	1.3	1.0	4.8	1.0	5.6	2.2
22	5.5	5.4	10.6	10.9	2.1	1.4	1.2	4.9	1.2	5.8	2.5
24	5.8	5.5	11.0	11.3	2.4	1.6	1.3	5.0	1.3	6.0	2.8
26	6.0	5.7	11.4	11.7	2.7	1.8	1.4	5.1	1.5	6.3	3.2
28	6.3	5.9	11.7	12.2	3.1	2.0	1.6	5.2	1.7	6.6	3.5
30	6.6	6.1	12.2	12.7	3.4	2.2	1.7	5.3	1.9	6.9	3.9
32	7.0	6.3	12.6	13.3	3.8	2.4	1.9	5.4	2.1	7.2	4.3
34	7.4	6.5	13.1	13.9	4.3	2.6	2.1	5.6	2.4	7.6	4.8
36	7.8	6.7	13.7	14.5	4.8	2.8	2.3	5.7	2.6	8.0	5.3
38	8.3	7.0	14.3	15.3	5.3	3.1	2.5	5.9	2.9	8.4	5.8
40	8.8	7.3	14.9	16.1	5.9	3.4	2.7	6.0	3.3	8.9	6.4
42	9.5	7.6	15.7	17.0	6.6	3.7	2.9	6.2	3.7	9.5	7.0
44	10.2	7.9	16.5	18.1	7.4	4.0	3.2	6.4	4.1	10.2	7.7
46	11.0	8.2	17.5	19.3	8.3	4.3	3.4	6.6	4.6	10.9	8.4
48	12.0	8.6	18.6	20.6	9.4	4.7	3.7	6.8	5.2	11.8	9.3
50	13.2	9.0	19.9	22.2	10.6	5.1	4.0	7.0	5.9	12.8	10.2
52	14.6	9.5	21.4	24.1	12.1	5.5	4.4	7.3	6.7	14.1	11.3
54	16.4	10.0	23.3	26.4	14.0	6.0	4.8	7.6	7.8	15.7	12.6
56	18.7	10.7	25.6	29.3	16.5	6.5	5.2	7.9	9.1	17.7	14.0
58	21.8	11.3	28.7	33.2	19.7	7.1	5.7	8.3	10.9	20.4	15.8
60	26.3	12.2	33.0	38.5	24.4	7.8	6.3	8.7	13.5	24.3	18.0
62	33.6	13.2	39.8	46.8	31.9	8.7	7.0	9.2	17.7	30.6	20.9
64	48.4	14.5	53.0	62.9	47.0	9.8	7.8	9.9	26.1	43.1	25.0
66	110.1	16.8	105.9	126.9	109.3	11.6	9.3	10.9	60.6	95.0	32.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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WH = TOT. WIDTH DISTURB. HOR.
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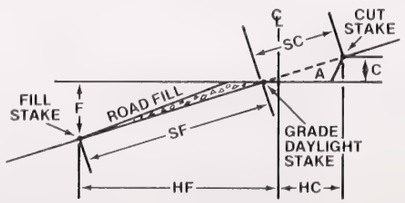
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

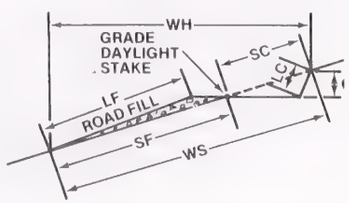
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 8 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	4.5	4.7	9.1	9.2	.8	.7	.5	4.5	.4	4.7	1.0
12	4.6	4.8	9.4	9.5	1.0	.8	.6	4.6	.6	4.8	1.2
14	4.8	5.0	9.7	9.8	1.2	1.0	.7	4.7	.7	5.0	1.5
16	5.0	5.1	10.0	10.1	1.4	1.1	.8	4.8	.8	5.2	1.7
18	5.2	5.3	10.3	10.5	1.7	1.3	.9	4.9	.9	5.4	2.0
20	5.4	5.5	10.7	10.9	1.9	1.5	1.1	5.1	1.1	5.6	2.3
22	5.6	5.7	11.0	11.3	2.2	1.7	1.2	5.2	1.2	5.8	2.6
24	5.9	5.9	11.4	11.8	2.5	1.9	1.4	5.4	1.4	6.1	3.0
26	6.2	6.1	11.9	12.3	2.8	2.2	1.5	5.5	1.6	6.3	3.3
28	6.5	6.3	12.3	12.8	3.2	2.4	1.7	5.7	1.7	6.6	3.7
30	6.8	6.6	12.8	13.4	3.5	2.7	1.9	5.9	2.0	6.9	4.2
32	7.2	6.8	13.4	14.0	4.0	2.9	2.1	6.1	2.2	7.3	4.6
34	7.6	7.1	14.0	14.8	4.4	3.2	2.3	6.3	2.5	7.7	5.1
36	8.1	7.5	14.6	15.6	5.0	3.6	2.5	6.5	2.7	8.1	5.7
38	8.6	7.8	15.4	16.5	5.5	3.9	2.8	6.8	3.1	8.6	6.3
40	9.3	8.2	16.2	17.4	6.2	4.3	3.0	7.0	3.4	9.2	6.9
42	9.9	8.6	17.1	18.6	6.9	4.7	3.3	7.3	3.9	9.8	7.7
44	10.7	9.1	18.2	19.8	7.8	5.2	3.7	7.7	4.3	10.5	8.5
46	11.7	9.6	19.3	21.3	8.8	5.7	4.0	8.0	4.9	11.3	9.4
48	12.8	10.2	20.7	23.0	10.0	6.2	4.4	8.4	5.5	12.3	10.5
50	14.1	10.8	22.3	24.9	11.4	6.8	4.8	8.8	6.3	13.5	11.7
52	15.8	11.6	24.2	27.3	13.1	7.5	5.3	9.3	7.3	14.9	13.1
54	17.8	12.4	26.6	30.2	15.3	8.3	5.9	9.9	8.5	16.7	14.8
56	20.5	13.4	29.6	33.9	18.0	9.3	6.5	10.5	10.0	19.0	16.8
58	24.1	14.6	33.5	38.7	21.8	10.3	7.3	11.3	12.1	22.2	19.3
60	29.4	16.0	38.9	45.4	27.3	11.6	8.2	12.2	15.1	26.7	22.5
62	38.1	17.7	47.5	55.9	36.2	13.2	9.4	13.4	20.1	34.1	26.8
64	55.8	20.2	64.0	76.0	54.2	15.4	10.9	14.9	30.1	49.1	33.3
66	130.9	24.3	129.5	155.2	130.0	19.0	13.4	17.4	72.1	112.1	46.3

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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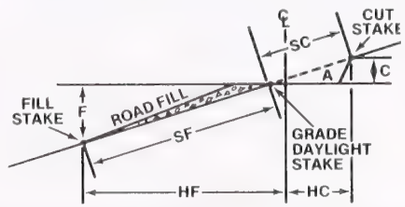
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

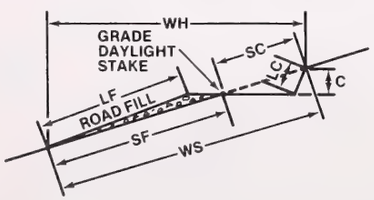
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 8 FEET

CUT SLOPE = 1.5 TO 1

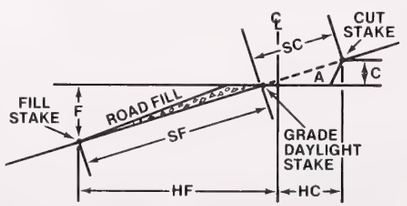
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	4.5	4.9	9.4	9.5	.8	.9	.5	4.7	.5	4.7	1.0
12	4.7	5.1	9.8	9.8	1.0	1.1	.6	4.9	.6	4.8	1.3
14	4.9	5.3	10.1	10.2	1.2	1.3	.7	5.1	.7	5.0	1.5
16	5.1	5.5	10.5	10.7	1.5	1.6	.9	5.3	.8	5.2	1.8
18	5.3	5.8	11.0	11.1	1.7	1.9	1.0	5.5	.9	5.4	2.1
20	5.6	6.1	11.4	11.7	2.0	2.1	1.2	5.8	1.1	5.6	2.5
22	5.9	6.4	11.9	12.2	2.3	2.5	1.4	6.1	1.3	5.9	2.8
24	6.2	6.7	12.5	12.9	2.6	2.8	1.6	6.3	1.4	6.2	3.2
26	6.5	7.1	13.1	13.6	2.9	3.2	1.8	6.7	1.6	6.5	3.7
28	6.9	7.5	13.8	14.3	3.3	3.6	2.0	7.0	1.9	6.8	4.2
30	7.3	7.9	14.5	15.2	3.8	4.1	2.3	7.4	2.1	7.1	4.7
32	7.7	8.4	15.4	16.2	4.3	4.6	2.6	7.8	2.4	7.5	5.3
34	8.3	9.0	16.3	17.2	4.8	5.2	2.9	8.3	2.7	8.0	6.0
36	8.9	9.6	17.4	18.5	5.4	5.9	3.3	8.9	3.0	8.5	6.8
38	9.5	10.4	18.6	19.9	6.1	6.6	3.7	9.5	3.4	9.1	7.7
40	10.3	11.2	20.0	21.5	6.9	7.5	4.2	10.2	3.8	9.8	8.7
42	11.2	12.2	21.6	23.5	7.9	8.5	4.7	11.1	4.4	10.5	9.8
44	12.3	13.4	23.5	25.7	9.0	9.7	5.4	12.1	5.0	11.4	11.2
46	13.6	14.8	25.8	28.4	10.3	11.1	6.2	13.3	5.7	12.5	12.9
48	15.2	16.5	28.6	31.7	11.9	12.9	7.1	14.7	6.6	13.9	14.9
50	17.2	18.6	32.0	35.8	13.8	15.0	8.3	16.5	7.7	15.5	17.3
52	19.7	21.3	36.4	41.0	16.4	17.7	9.8	18.8	9.1	17.6	20.5
54	23.0	24.9	42.1	47.9	19.7	21.3	11.8	21.7	10.9	20.4	24.6
56	27.5	29.8	50.0	57.3	24.2	26.3	14.6	25.9	13.4	24.1	30.3
58	34.1	37.0	61.5	71.1	30.9	33.5	18.6	31.9	17.1	29.7	38.6
60	44.8	48.5	80.0	93.3	41.5	45.0	25.0	41.5	23.0	38.5	52.0
62	64.5	70.0	114.3	134.5	61.3	66.5	36.9	59.3	34.0	55.0	76.7
64	113.9	123.5	200.0	237.5	110.7	120.1	66.6	103.9	61.4	96.1	138.6
66	459.8	498.7	800.0	958.5	456.6	495.3	274.7	416.1	253.3	383.9	571.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

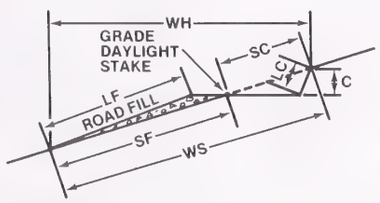
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 9 FEET

CUT SLOPE = VERTICAL

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	4.9	4.9	9.7	9.8	.9	.5	.5	4.5	.5	5.2	1.2
12	5.0	4.9	9.9	10.0	1.1	.6	.6	4.5	.6	5.4	1.4
14	5.2	5.0	10.1	10.2	1.3	.7	.7	4.5	.7	5.6	1.7
16	5.3	5.1	10.3	10.4	1.5	.8	.8	4.5	.8	5.8	2.0
18	5.5	5.1	10.5	10.6	1.8	.9	.9	4.5	1.0	6.0	2.3
20	5.7	5.2	10.7	10.9	2.0	1.0	1.0	4.5	1.1	6.2	2.6
22	5.9	5.3	10.9	11.2	2.3	1.1	1.1	4.5	1.3	6.4	2.9
24	6.1	5.3	11.1	11.5	2.6	1.2	1.2	4.5	1.4	6.6	3.2
26	6.4	5.4	11.4	11.8	2.9	1.4	1.4	4.5	1.6	6.9	3.6
28	6.6	5.5	11.7	12.1	3.2	1.5	1.5	4.5	1.8	7.2	3.9
30	6.9	5.6	12.0	12.5	3.6	1.6	1.6	4.5	2.0	7.5	4.3
32	7.3	5.7	12.3	12.9	4.0	1.7	1.7	4.5	2.2	7.8	4.7
34	7.6	5.8	12.7	13.4	4.4	1.9	1.9	4.5	2.4	8.2	5.1
36	8.0	5.9	13.1	13.9	4.9	2.0	2.0	4.5	2.7	8.6	5.5
38	8.4	6.0	13.5	14.4	5.4	2.1	2.1	4.5	3.0	9.0	6.0
40	8.9	6.1	14.0	15.0	6.0	2.3	2.3	4.5	3.3	9.5	6.5
42	9.5	6.3	14.5	15.7	6.6	2.4	2.4	4.5	3.7	10.0	7.0
44	10.1	6.4	15.1	16.5	7.3	2.6	2.6	4.5	4.1	10.6	7.5
46	10.8	6.5	15.8	17.4	8.2	2.7	2.7	4.5	4.5	11.3	8.1
48	11.7	6.7	16.6	18.4	9.1	2.9	2.9	4.5	5.1	12.1	8.8
50	12.7	6.9	17.5	19.6	10.2	3.1	3.1	4.5	5.7	13.0	9.5
52	13.9	7.1	18.6	21.0	11.6	3.3	3.3	4.5	6.4	14.1	10.3
54	15.4	7.3	20.0	22.7	13.2	3.5	3.5	4.5	7.3	15.5	11.1
56	17.4	7.5	21.7	24.9	15.3	3.7	3.7	4.5	8.5	17.2	12.1
58	20.0	7.8	24.0	27.8	18.1	3.9	3.9	4.5	10.0	19.5	13.2
60	23.7	8.1	27.3	31.8	22.0	4.2	4.2	4.5	12.2	22.8	14.6
62	29.7	8.5	32.4	38.2	28.2	4.5	4.5	4.5	15.6	27.9	16.2
64	41.6	9.0	42.6	50.6	40.4	4.9	4.9	4.5	22.4	38.1	18.5
66	91.0	9.9	84.2	100.9	90.4	5.4	5.4	4.5	50.1	79.7	22.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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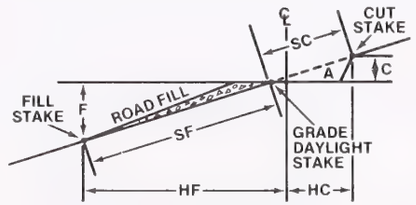
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

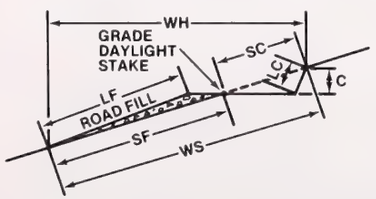
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 9 FEET

CUT SLOPE = .10 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	4.9	4.9	9.8	9.8	.9	.5	.5	4.5	.5	5.2	1.2
12	5.0	5.0	10.0	10.0	1.1	.6	.6	4.6	.6	5.4	1.5
14	5.2	5.0	10.2	10.3	1.3	.7	.7	4.6	.7	5.6	1.7
16	5.4	5.1	10.4	10.5	1.5	.8	.8	4.6	.8	5.8	2.0
18	5.5	5.2	10.6	10.7	1.8	.9	.9	4.6	1.0	6.0	2.3
20	5.7	5.3	10.8	11.0	2.0	1.0	1.0	4.6	1.1	6.2	2.6
22	6.0	5.3	11.0	11.3	2.3	1.2	1.1	4.6	1.3	6.4	2.9
24	6.2	5.4	11.3	11.6	2.6	1.3	1.3	4.6	1.4	6.7	3.3
26	6.4	5.5	11.6	12.0	2.9	1.4	1.4	4.6	1.6	6.9	3.6
28	6.7	5.6	11.9	12.3	3.3	1.5	1.5	4.7	1.8	7.2	4.0
30	7.0	5.7	12.2	12.7	3.6	1.7	1.6	4.7	2.0	7.5	4.4
32	7.3	5.8	12.5	13.2	4.0	1.8	1.8	4.7	2.2	7.9	4.8
34	7.7	5.9	12.9	13.6	4.5	1.9	1.9	4.7	2.5	8.2	5.2
36	8.1	6.1	13.3	14.2	4.9	2.1	2.1	4.7	2.7	8.6	5.6
38	8.5	6.2	13.8	14.7	5.5	2.2	2.2	4.7	3.0	9.0	6.1
40	9.0	6.3	14.3	15.4	6.1	2.4	2.4	4.7	3.4	9.5	6.6
42	9.6	6.5	14.8	16.1	6.7	2.5	2.5	4.8	3.7	10.1	7.2
44	10.3	6.6	15.5	16.9	7.4	2.7	2.7	4.8	4.1	10.7	7.8
46	11.0	6.8	16.2	17.8	8.3	2.9	2.8	4.8	4.6	11.4	8.4
48	11.9	7.0	17.0	18.9	9.3	3.0	3.0	4.8	5.1	12.2	9.1
50	12.9	7.2	18.0	20.1	10.4	3.2	3.2	4.8	5.8	13.2	9.8
52	14.2	7.4	19.2	21.6	11.8	3.4	3.4	4.8	6.5	14.3	10.7
54	15.7	7.7	20.6	23.4	13.5	3.7	3.6	4.9	7.5	15.7	11.6
56	17.7	7.9	22.4	25.7	15.6	3.9	3.9	4.9	8.7	17.5	12.6
58	20.4	8.2	24.8	28.6	18.5	4.1	4.1	4.9	10.2	19.9	13.8
60	24.3	8.6	28.2	32.8	22.5	4.4	4.4	4.9	12.5	23.2	15.3
62	30.4	9.0	33.5	39.5	28.9	4.8	4.8	5.0	16.0	28.6	17.1
64	42.8	9.6	44.1	52.4	41.6	5.2	5.2	5.0	23.1	39.1	19.5
66	93.9	10.5	87.2	104.5	93.3	5.8	5.8	5.1	51.7	82.1	23.9

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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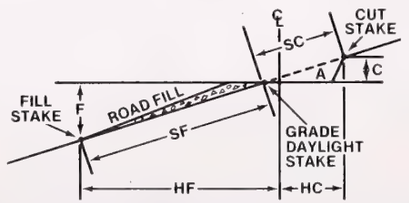
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

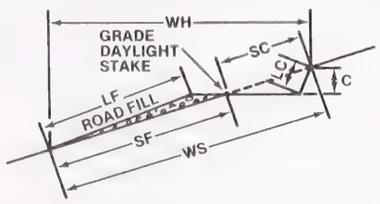
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 9 FEET

CUT SLOPE = .25 TO 1

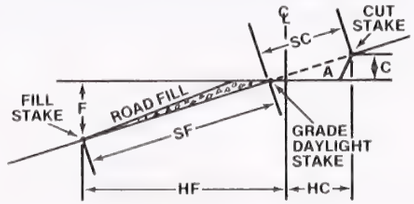
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	4.9	5.0	9.9	9.9	.9	.5	.5	4.6	.5	5.2	1.2
12	5.1	5.1	10.1	10.1	1.1	.6	.6	4.7	.6	5.4	1.5
14	5.2	5.1	10.3	10.4	1.3	.7	.7	4.7	.7	5.6	1.7
16	5.4	5.2	10.5	10.6	1.5	.8	.8	4.7	.9	5.8	2.0
18	5.6	5.3	10.7	10.9	1.8	1.0	.9	4.7	1.0	6.0	2.3
20	5.8	5.4	11.0	11.2	2.0	1.1	1.1	4.8	1.1	6.2	2.7
22	6.0	5.5	11.2	11.5	2.3	1.2	1.2	4.8	1.3	6.4	3.0
24	6.2	5.6	11.5	11.8	2.6	1.3	1.3	4.8	1.5	6.7	3.3
26	6.5	5.7	11.8	12.2	3.0	1.5	1.4	4.9	1.6	7.0	3.7
28	6.8	5.8	12.1	12.6	3.3	1.6	1.6	4.9	1.8	7.2	4.1
30	7.1	5.9	12.5	13.0	3.7	1.8	1.7	4.9	2.0	7.6	4.5
32	7.4	6.1	12.9	13.5	4.1	1.9	1.8	5.0	2.3	7.9	4.9
34	7.8	6.2	13.3	14.0	4.5	2.1	2.0	5.0	2.5	8.3	5.4
36	8.2	6.3	13.7	14.6	5.0	2.2	2.2	5.0	2.8	8.7	5.8
38	8.7	6.5	14.2	15.2	5.6	2.4	2.3	5.1	3.1	9.1	6.4
40	9.2	6.7	14.8	15.9	6.2	2.6	2.5	5.1	3.4	9.6	6.9
42	9.8	6.8	15.4	16.7	6.9	2.7	2.7	5.2	3.8	10.2	7.5
44	10.5	7.0	16.1	17.5	7.6	2.9	2.8	5.2	4.2	10.8	8.1
46	11.3	7.2	16.8	18.5	8.5	3.1	3.0	5.3	4.7	11.6	8.8
48	12.2	7.5	17.7	19.7	9.5	3.3	3.2	5.3	5.3	12.4	9.6
50	13.3	7.7	18.8	21.0	10.7	3.6	3.4	5.4	5.9	13.4	10.4
52	14.6	8.0	20.0	22.6	12.1	3.8	3.7	5.4	6.7	14.6	11.3
54	16.2	8.3	21.6	24.5	13.9	4.0	3.9	5.5	7.7	16.1	12.3
56	18.3	8.6	23.5	26.9	16.2	4.3	4.2	5.5	9.0	17.9	13.5
58	21.2	9.0	26.0	30.1	19.1	4.6	4.5	5.6	10.6	20.4	14.9
60	25.2	9.4	29.7	34.6	23.4	5.0	4.8	5.7	13.0	24.0	16.5
62	31.7	9.9	35.4	41.6	30.1	5.4	5.2	5.8	16.7	29.6	18.6
64	44.7	10.6	46.6	55.3	43.5	5.9	5.7	5.9	24.1	40.7	21.4
66	98.8	11.7	92.3	110.6	98.1	6.7	6.5	6.1	54.4	86.2	26.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

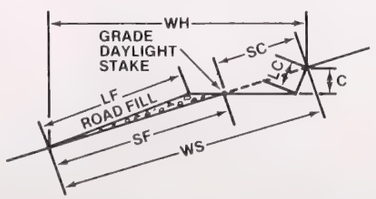
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 9 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.0	5.1	10.0	10.0	.9	.6	.5	4.8	.5	5.2	1.2
12	5.1	5.2	10.2	10.3	1.1	.7	.6	4.8	.6	5.4	1.5
14	5.3	5.3	10.5	10.6	1.3	.8	.7	4.9	.7	5.6	1.8
16	5.5	5.4	10.7	10.9	1.6	1.0	.9	4.9	.9	5.8	2.1
18	5.7	5.5	11.0	11.2	1.8	1.1	1.0	5.0	1.0	6.0	2.4
20	5.9	5.6	11.3	11.5	2.1	1.2	1.1	5.1	1.2	6.2	2.7
22	6.1	5.8	11.6	11.9	2.4	1.4	1.2	5.1	1.3	6.5	3.1
24	6.4	5.9	11.9	12.3	2.7	1.5	1.4	5.2	1.5	6.7	3.5
26	6.6	6.0	12.3	12.7	3.0	1.7	1.5	5.3	1.7	7.0	3.9
28	6.9	6.2	12.6	13.1	3.4	1.9	1.7	5.3	1.9	7.3	4.3
30	7.3	6.3	13.0	13.6	3.8	2.0	1.8	5.4	2.1	7.6	4.7
32	7.6	6.5	13.5	14.2	4.2	2.2	2.0	5.5	2.3	8.0	5.2
34	8.0	6.7	14.0	14.7	4.7	2.4	2.2	5.6	2.6	8.4	5.7
36	8.5	6.9	14.5	15.4	5.2	2.6	2.3	5.7	2.9	8.8	6.2
38	9.0	7.1	15.1	16.1	5.8	2.8	2.5	5.8	3.2	9.3	6.8
40	9.6	7.3	15.7	16.9	6.4	3.0	2.7	5.9	3.6	9.8	7.4
42	10.2	7.6	16.4	17.8	7.1	3.3	2.9	6.0	4.0	10.4	8.1
44	10.9	7.8	17.2	18.8	7.9	3.5	3.2	6.1	4.4	11.1	8.8
46	11.8	8.1	18.1	19.9	8.9	3.8	3.4	6.2	4.9	11.9	9.6
48	12.8	8.4	19.1	21.2	10.0	4.1	3.6	6.3	5.5	12.8	10.5
50	14.0	8.8	20.3	22.7	11.3	4.4	3.9	6.5	6.3	13.9	11.5
52	15.4	9.1	21.8	24.5	12.8	4.7	4.2	6.6	7.1	15.2	12.6
54	17.2	9.5	23.5	26.8	14.8	5.1	4.5	6.8	8.2	16.8	13.9
56	19.5	10.0	25.8	29.5	17.2	5.5	4.9	6.9	9.5	18.8	15.3
58	22.6	10.5	28.7	33.1	20.5	5.9	5.3	7.1	11.4	21.5	17.0
60	27.1	11.1	32.8	38.2	25.2	6.4	5.7	7.4	14.0	25.4	19.1
62	34.3	11.9	39.3	46.2	32.6	7.0	6.3	7.6	18.1	31.6	21.7
64	48.8	12.8	51.9	61.7	47.4	7.7	6.9	8.0	26.3	44.0	25.5
66	109.2	14.5	103.2	123.6	108.4	8.9	8.0	8.5	60.1	94.7	32.2

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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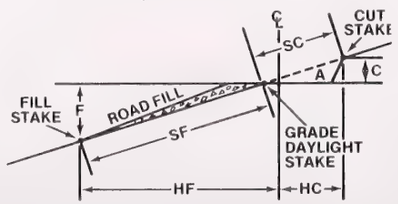
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

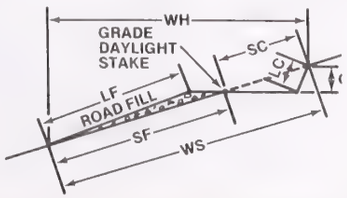
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 9 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.0	5.2	10.1	10.2	.9	.6	.5	4.9	.5	5.2	1.2
12	5.2	5.3	10.4	10.5	1.1	.8	.6	5.0	.6	5.4	1.5
14	5.3	5.4	10.7	10.8	1.3	.9	.8	5.1	.7	5.6	1.8
16	5.5	5.6	11.0	11.1	1.6	1.1	.9	5.2	.9	5.8	2.1
18	5.7	5.7	11.3	11.5	1.8	1.3	1.0	5.3	1.0	6.0	2.5
20	6.0	5.9	11.6	11.9	2.1	1.4	1.2	5.4	1.2	6.3	2.8
22	6.2	6.0	12.0	12.3	2.4	1.6	1.3	5.5	1.3	6.5	3.2
24	6.5	6.2	12.4	12.7	2.7	1.8	1.5	5.6	1.5	6.8	3.6
26	6.8	6.4	12.8	13.2	3.1	2.0	1.6	5.7	1.7	7.1	4.0
28	7.1	6.6	13.2	13.7	3.5	2.2	1.8	5.8	1.9	7.4	4.5
30	7.5	6.8	13.7	14.3	3.9	2.5	2.0	6.0	2.1	7.7	5.0
32	7.9	7.1	14.2	14.9	4.3	2.7	2.1	6.1	2.4	8.1	5.5
34	8.3	7.3	14.8	15.6	4.8	2.9	2.4	6.3	2.7	8.5	6.1
36	8.8	7.6	15.4	16.4	5.4	3.2	2.6	6.4	3.0	9.0	6.7
38	9.3	7.9	16.1	17.2	6.0	3.5	2.8	6.6	3.3	9.5	7.3
40	10.0	8.2	16.8	18.1	6.7	3.8	3.0	6.8	3.7	10.0	8.0
42	10.7	8.5	17.7	19.2	7.4	4.1	3.3	7.0	4.1	10.7	8.8
44	11.5	8.9	18.6	20.3	8.3	4.5	3.6	7.2	4.6	11.4	9.7
46	12.4	9.3	19.7	21.7	9.3	4.8	3.9	7.4	5.2	12.3	10.6
48	13.5	9.7	20.9	23.2	10.5	5.2	4.2	7.6	5.8	13.3	11.7
50	14.8	10.2	22.4	25.0	12.0	5.7	4.5	7.9	6.6	14.4	12.9
52	16.4	10.7	24.1	27.1	13.7	6.2	4.9	8.2	7.6	15.9	14.3
54	18.4	11.3	26.2	29.7	15.8	6.7	5.4	8.5	8.8	17.6	15.9
56	21.0	12.0	28.8	33.0	18.5	7.3	5.9	8.9	10.3	19.9	17.8
58	24.5	12.8	32.3	37.3	22.2	8.0	6.4	9.3	12.3	23.0	20.0
60	29.6	13.7	37.1	43.3	27.5	8.8	7.0	9.8	15.2	27.4	22.8
62	37.8	14.8	44.8	52.7	35.9	9.8	7.8	10.4	19.9	34.4	26.4
64	54.4	16.4	59.6	70.8	52.9	11.0	8.8	11.1	29.3	48.5	31.6
66	123.8	18.9	119.1	142.7	123.0	13.0	10.4	12.3	68.2	106.8	41.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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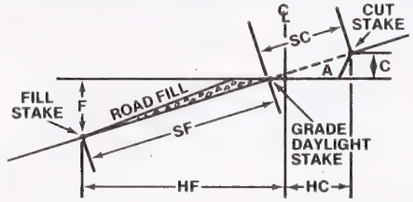
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

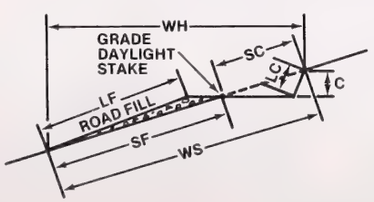
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 9 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.0	5.3	10.3	10.3	.9	.7	.5	5.0	.5	5.3	1.3
12	5.2	5.5	10.6	10.7	1.1	.9	.6	5.1	.6	5.4	1.5
14	5.4	5.6	10.9	11.0	1.3	1.1	.8	5.3	.7	5.6	1.9
16	5.6	5.8	11.2	11.4	1.6	1.3	.9	5.4	.9	5.8	2.2
18	5.8	6.0	11.6	11.8	1.9	1.5	1.1	5.6	1.0	6.0	2.5
20	6.1	6.2	12.0	12.2	2.1	1.7	1.2	5.7	1.2	6.3	2.9
22	6.3	6.4	12.4	12.7	2.5	1.9	1.4	5.9	1.4	6.5	3.3
24	6.6	6.6	12.9	13.2	2.8	2.2	1.5	6.0	1.5	6.8	3.8
26	6.9	6.8	13.3	13.8	3.2	2.4	1.7	6.2	1.7	7.1	4.2
28	7.3	7.1	13.9	14.4	3.5	2.7	1.9	6.4	2.0	7.5	4.7
30	7.7	7.4	14.4	15.1	4.0	3.0	2.1	6.6	2.2	7.8	5.3
32	8.1	7.7	15.1	15.8	4.5	3.3	2.3	6.8	2.5	8.2	5.8
34	8.6	8.0	15.7	16.6	5.0	3.7	2.6	7.1	2.8	8.6	6.5
36	9.1	8.4	16.5	17.5	5.6	4.0	2.8	7.3	3.1	9.1	7.2
38	9.7	8.8	17.3	18.5	6.2	4.4	3.1	7.6	3.5	9.7	7.9
40	10.4	9.2	18.2	19.6	7.0	4.8	3.4	7.9	3.9	10.3	8.8
42	11.2	9.7	19.3	20.9	7.8	5.3	3.8	8.3	4.3	11.0	9.7
44	12.1	10.2	20.4	22.3	8.8	5.8	4.1	8.6	4.9	11.8	10.8
46	13.1	10.8	21.8	23.9	9.9	6.4	4.5	9.0	5.5	12.7	12.0
48	14.4	11.5	23.3	25.8	11.2	7.0	5.0	9.5	6.2	13.8	13.3
50	15.9	12.2	25.1	28.1	12.8	7.7	5.4	9.9	7.1	15.2	14.8
52	17.7	13.0	27.3	30.7	14.7	8.5	6.0	10.5	8.2	16.8	16.6
54	20.0	14.0	29.9	34.0	17.2	9.4	6.6	11.1	9.5	18.8	18.7
56	23.0	15.1	33.2	38.1	20.3	10.4	7.4	11.9	11.3	21.4	21.3
58	27.1	16.4	37.6	43.5	24.5	11.6	8.2	12.7	13.6	24.9	24.4
60	33.1	18.0	43.8	51.1	30.7	13.1	9.2	13.7	17.0	30.1	28.5
62	42.9	20.0	53.4	62.9	40.7	14.9	10.5	15.0	22.6	38.4	33.9
64	62.8	22.7	72.0	85.5	61.0	17.3	12.2	16.7	33.9	55.3	42.1
66	147.2	27.4	145.7	174.6	146.2	21.3	15.1	19.6	81.1	126.1	58.6

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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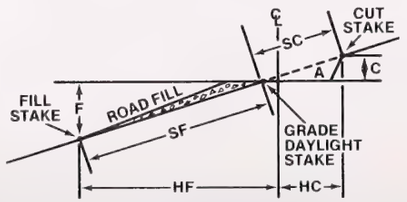
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

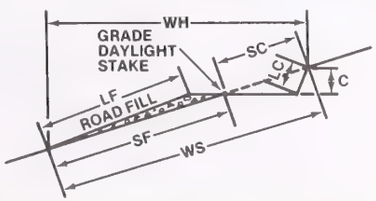
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 9 FEET

CUT SLOPE = 1.5 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.1	5.5	10.6	10.6	.9	1.0	.6	5.3	.5	5.3	1.3
12	5.3	5.8	11.0	11.1	1.1	1.2	.7	5.5	.6	5.4	1.6
14	5.5	6.0	11.4	11.5	1.4	1.5	.8	5.7	.8	5.6	1.9
16	5.8	6.2	11.8	12.0	1.6	1.8	1.0	6.0	.9	5.9	2.3
18	6.0	6.5	12.3	12.5	1.9	2.1	1.2	6.2	1.1	6.1	2.7
20	6.3	6.8	12.9	13.1	2.2	2.4	1.3	6.5	1.2	6.4	3.1
22	6.6	7.2	13.4	13.8	2.6	2.8	1.5	6.8	1.4	6.6	3.6
24	6.9	7.5	14.1	14.5	2.9	3.2	1.8	7.1	1.6	6.9	4.1
26	7.3	7.9	14.8	15.2	3.3	3.6	2.0	7.5	1.8	7.3	4.7
28	7.7	8.4	15.5	16.1	3.8	4.1	2.3	7.9	2.1	7.6	5.3
30	8.2	8.9	16.4	17.1	4.2	4.6	2.6	8.3	2.4	8.0	6.0
32	8.7	9.5	17.3	18.2	4.8	5.2	2.9	8.8	2.7	8.5	6.7
34	9.3	10.1	18.4	19.4	5.4	5.9	3.2	9.4	3.0	9.0	7.6
36	10.0	10.8	19.6	20.8	6.1	6.6	3.7	10.0	3.4	9.6	8.6
38	10.7	11.6	20.9	22.4	6.9	7.5	4.1	10.7	3.8	10.2	9.7
40	11.6	12.6	22.5	24.2	7.8	8.4	4.7	11.5	4.3	11.0	11.0
42	12.7	13.7	24.3	26.4	8.8	9.6	5.3	12.5	4.9	11.9	12.4
44	13.9	15.0	26.5	28.9	10.1	10.9	6.1	13.6	5.6	12.9	14.2
46	15.3	16.6	29.0	32.0	11.5	12.5	6.9	14.9	6.4	14.1	16.3
48	17.1	18.6	32.1	35.7	13.3	14.5	8.0	16.5	7.4	15.6	18.8
50	19.3	20.9	36.0	40.2	15.6	16.9	9.4	18.5	8.6	17.5	21.9
52	22.1	24.0	40.9	46.1	18.4	20.0	11.1	21.1	10.2	19.8	25.9
54	25.8	28.0	47.4	53.8	22.1	24.0	13.3	24.5	12.3	22.9	31.2
56	30.9	33.5	56.2	64.5	27.2	29.5	16.4	29.1	15.1	27.2	38.4
58	38.4	41.6	69.2	80.0	34.7	37.7	20.9	35.8	19.3	33.4	48.9
60	50.3	54.6	90.0	105.0	46.7	50.7	28.1	46.6	25.9	43.4	65.8
62	72.6	78.7	128.6	151.3	68.9	74.8	41.5	66.7	38.2	61.9	97.1
64	128.1	139.0	225.0	267.1	124.5	135.1	74.9	116.9	69.1	108.1	175.4
66	517.3	561.1	900.0	1078.3	513.7	557.2	309.1	468.1	284.9	431.9	723.6

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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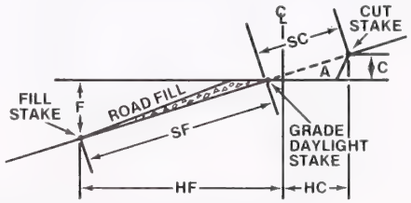
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

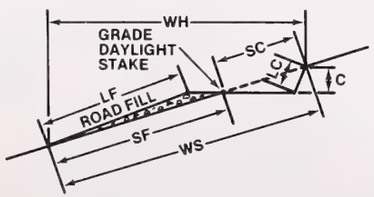
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 10 FEET

CUT SLOPE = VERTICAL

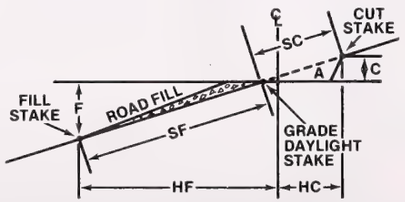
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.4	5.4	10.8	10.9	1.0	.5	.5	5.0	.5	5.8	1.5
12	5.6	5.5	11.0	11.1	1.2	.7	.7	5.0	.7	6.0	1.8
14	5.8	5.5	11.2	11.3	1.4	.8	.8	5.0	.8	6.2	2.1
16	5.9	5.6	11.4	11.6	1.7	.9	.9	5.0	.9	6.4	2.5
18	6.1	5.7	11.6	11.8	2.0	1.0	1.0	5.0	1.1	6.6	2.8
20	6.3	5.8	11.9	12.1	2.2	1.1	1.1	5.0	1.2	6.9	3.2
22	6.6	5.8	12.1	12.4	2.5	1.3	1.3	5.0	1.4	7.1	3.6
24	6.8	5.9	12.4	12.7	2.9	1.4	1.4	5.0	1.6	7.4	4.0
26	7.1	6.0	12.7	13.1	3.2	1.5	1.5	5.0	1.8	7.7	4.4
28	7.4	6.1	13.0	13.5	3.6	1.6	1.6	5.0	2.0	8.0	4.8
30	7.7	6.2	13.3	13.9	4.0	1.8	1.8	5.0	2.2	8.3	5.3
32	8.1	6.3	13.7	14.4	4.4	1.9	1.9	5.0	2.5	8.7	5.8
34	8.5	6.4	14.1	14.9	4.9	2.1	2.1	5.0	2.7	9.1	6.3
36	8.9	6.5	14.5	15.4	5.4	2.2	2.2	5.0	3.0	9.5	6.8
38	9.4	6.7	15.0	16.0	6.0	2.4	2.4	5.0	3.3	10.0	7.4
40	9.9	6.8	15.5	16.7	6.6	2.5	2.5	5.0	3.7	10.5	8.0
42	10.5	6.9	16.1	17.5	7.4	2.7	2.7	5.0	4.1	11.1	8.6
44	11.2	7.1	16.8	18.3	8.2	2.9	2.9	5.0	4.5	11.8	9.3
46	12.0	7.3	17.5	19.3	9.1	3.0	3.0	5.0	5.0	12.5	10.0
48	13.0	7.5	18.4	20.4	10.1	3.2	3.2	5.0	5.6	13.4	10.8
50	14.1	7.7	19.5	21.8	11.4	3.4	3.4	5.0	6.3	14.5	11.7
52	15.5	7.9	20.7	23.3	12.9	3.6	3.6	5.0	7.1	15.7	12.7
54	17.1	8.1	22.2	25.3	14.7	3.9	3.9	5.0	8.1	17.2	13.7
56	19.3	8.4	24.1	27.7	17.0	4.1	4.1	5.0	9.4	19.1	14.9
58	22.2	8.7	26.7	30.9	20.1	4.4	4.4	5.0	11.1	21.7	16.3
60	26.3	9.0	30.3	35.4	24.4	4.6	4.6	5.0	13.5	25.3	18.0
62	33.0	9.5	36.1	42.4	31.3	5.0	5.0	5.0	17.4	31.1	20.0
64	46.2	10.0	47.4	56.2	44.9	5.4	5.4	5.0	24.9	42.4	22.8
66	101.1	11.0	93.6	112.1	100.4	6.0	6.0	5.0	55.7	88.6	27.7

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

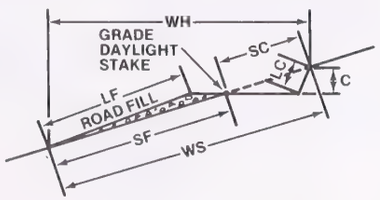
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 10 FEET

CUT SLOPE = .10 TO 1

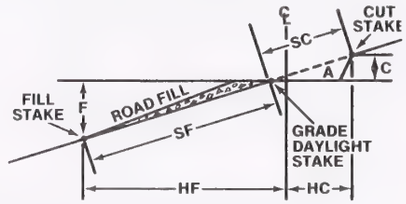
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.4	5.5	10.9	10.9	1.0	.5	.5	5.1	.5	5.8	1.5
12	5.6	5.5	11.1	11.1	1.2	.7	.7	5.1	.7	6.0	1.8
14	5.8	5.6	11.3	11.4	1.4	.8	.8	5.1	.8	6.2	2.1
16	6.0	5.7	11.5	11.6	1.7	.9	.9	5.1	.9	6.4	2.5
18	6.2	5.8	11.7	11.9	2.0	1.0	1.0	5.1	1.1	6.6	2.8
20	6.4	5.8	12.0	12.2	2.3	1.2	1.1	5.1	1.3	6.9	3.2
22	6.6	5.9	12.3	12.6	2.6	1.3	1.3	5.1	1.4	7.1	3.6
24	6.9	6.0	12.5	12.9	2.9	1.4	1.4	5.1	1.6	7.4	4.0
26	7.1	6.1	12.9	13.3	3.2	1.6	1.5	5.2	1.8	7.7	4.5
28	7.4	6.2	13.2	13.7	3.6	1.7	1.7	5.2	2.0	8.0	4.9
30	7.8	6.4	13.5	14.1	4.0	1.8	1.8	5.2	2.2	8.4	5.4
32	8.1	6.5	13.9	14.6	4.5	2.0	2.0	5.2	2.5	8.7	5.9
34	8.5	6.6	14.3	15.1	5.0	2.1	2.1	5.2	2.8	9.1	6.4
36	9.0	6.7	14.8	15.7	5.5	2.3	2.3	5.2	3.0	9.6	7.0
38	9.5	6.9	15.3	16.4	6.1	2.5	2.4	5.2	3.4	10.1	7.6
40	10.0	7.0	15.9	17.1	6.7	2.6	2.6	5.3	3.7	10.6	8.2
42	10.7	7.2	16.5	17.9	7.5	2.8	2.8	5.3	4.1	11.2	8.9
44	11.4	7.4	17.2	18.8	8.3	3.0	3.0	5.3	4.6	11.9	9.6
46	12.2	7.6	18.0	19.8	9.2	3.2	3.2	5.3	5.1	12.7	10.4
48	13.2	7.8	18.9	21.0	10.3	3.4	3.4	5.3	5.7	13.6	11.2
50	14.4	8.0	20.0	22.3	11.6	3.6	3.6	5.4	6.4	14.6	12.1
52	15.8	8.2	21.3	24.0	13.1	3.8	3.8	5.4	7.3	15.9	13.2
54	17.5	8.5	22.9	26.0	15.0	4.1	4.0	5.4	8.3	17.5	14.3
56	19.7	8.8	24.9	28.5	17.4	4.3	4.3	5.4	9.6	19.4	15.6
58	22.7	9.1	27.5	31.8	20.5	4.6	4.6	5.5	11.4	22.1	17.1
60	27.0	9.5	31.3	36.5	25.0	4.9	4.9	5.5	13.9	25.8	18.9
62	33.8	10.0	37.3	43.8	32.1	5.3	5.3	5.5	17.8	31.7	21.1
64	47.5	10.7	49.0	58.2	46.2	5.8	5.7	5.6	25.6	43.4	24.1
66	104.3	11.7	96.9	116.1	103.6	6.5	6.5	5.6	57.5	91.2	29.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

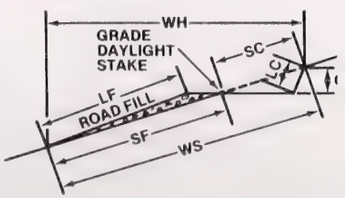
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 10 FEET

CUT SLOPE = .25 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.5	5.5	11.0	11.0	1.0	.6	.6	5.1	.5	5.8	1.5
12	5.6	5.6	11.2	11.3	1.2	.7	.7	5.2	.7	6.0	1.8
14	5.8	5.7	11.4	11.5	1.5	.8	.8	5.2	.8	6.2	2.2
16	6.0	5.8	11.7	11.8	1.7	.9	.9	5.2	.9	6.4	2.5
18	6.2	5.9	11.9	12.1	2.0	1.1	1.0	5.3	1.1	6.7	2.9
20	6.4	6.0	12.2	12.4	2.3	1.2	1.2	5.3	1.3	6.9	3.3
22	6.7	6.1	12.5	12.8	2.6	1.4	1.3	5.3	1.4	7.2	3.7
24	6.9	6.2	12.8	13.2	2.9	1.5	1.5	5.4	1.6	7.4	4.1
26	7.2	6.3	13.1	13.6	3.3	1.6	1.6	5.4	1.8	7.7	4.6
28	7.5	6.5	13.5	14.0	3.7	1.8	1.7	5.4	2.0	8.1	5.0
30	7.9	6.6	13.9	14.5	4.1	2.0	1.9	5.5	2.3	8.4	5.5
32	8.3	6.7	14.3	15.0	4.5	2.1	2.1	5.5	2.5	8.8	6.1
34	8.7	6.9	14.7	15.6	5.0	2.3	2.2	5.6	2.8	9.2	6.6
36	9.1	7.1	15.2	16.2	5.6	2.5	2.4	5.6	3.1	9.6	7.2
38	9.7	7.2	15.8	16.9	6.2	2.6	2.6	5.6	3.4	10.2	7.8
40	10.2	7.4	16.4	17.7	6.9	2.8	2.8	5.7	3.8	10.7	8.5
42	10.9	7.6	17.1	18.5	7.6	3.0	2.9	5.7	4.2	11.3	9.2
44	11.7	7.8	17.8	19.5	8.5	3.2	3.1	5.8	4.7	12.0	10.0
46	12.5	8.0	18.7	20.6	9.4	3.5	3.4	5.8	5.2	12.9	10.9
48	13.6	8.3	19.7	21.8	10.6	3.7	3.6	5.9	5.9	13.8	11.8
50	14.8	8.6	20.9	23.3	11.9	3.9	3.8	6.0	6.6	14.9	12.8
52	16.2	8.9	22.3	25.1	13.5	4.2	4.1	6.0	7.5	16.2	14.0
54	18.0	9.2	24.0	27.2	15.5	4.5	4.4	6.1	8.6	17.9	15.2
56	20.4	9.5	26.1	29.9	18.0	4.8	4.7	6.2	10.0	19.9	16.7
58	23.5	9.9	28.9	33.5	21.3	5.1	5.0	6.2	11.8	22.7	18.4
60	28.0	10.4	33.0	38.4	26.0	5.5	5.4	6.3	14.4	26.6	20.4
62	35.2	11.0	39.3	46.3	33.5	6.0	5.8	6.4	18.6	32.9	22.9
64	49.7	11.8	51.8	61.5	48.3	6.5	6.3	6.6	26.8	45.2	26.4
66	109.8	13.0	102.5	122.8	109.0	7.4	7.2	6.8	60.5	95.7	32.6

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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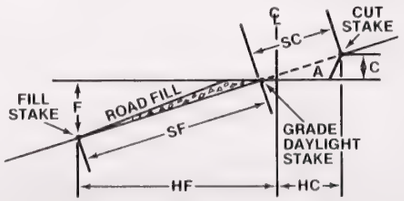
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

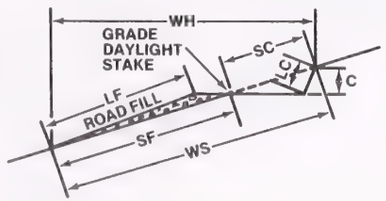
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 10 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.5	5.7	11.1	11.2	1.0	.6	.6	5.3	.5	5.8	1.5
12	5.7	5.8	11.4	11.4	1.2	.8	.7	5.3	.7	6.0	1.8
14	5.9	5.9	11.6	11.7	1.5	.9	.8	5.4	.8	6.2	2.2
16	6.1	6.0	11.9	12.1	1.7	1.1	.9	5.5	1.0	6.4	2.6
18	6.3	6.1	12.2	12.4	2.0	1.2	1.1	5.5	1.1	6.7	3.0
20	6.5	6.2	12.5	12.8	2.3	1.4	1.2	5.6	1.3	6.9	3.4
22	6.8	6.4	12.9	13.2	2.6	1.5	1.4	5.7	1.5	7.2	3.8
24	7.1	6.5	13.2	13.6	3.0	1.7	1.5	5.8	1.7	7.5	4.3
26	7.4	6.7	13.6	14.1	3.3	1.9	1.7	5.8	1.9	7.8	4.8
28	7.7	6.9	14.0	14.6	3.8	2.1	1.9	5.9	2.1	8.1	5.3
30	8.1	7.1	14.5	15.1	4.2	2.3	2.0	6.0	2.3	8.5	5.8
32	8.5	7.2	15.0	15.7	4.7	2.5	2.2	6.1	2.6	8.9	6.4
34	8.9	7.4	15.5	16.4	5.2	2.7	2.4	6.2	2.9	9.3	7.0
36	9.4	7.7	16.1	17.1	5.8	2.9	2.6	6.3	3.2	9.8	7.7
38	10.0	7.9	16.7	17.9	6.4	3.1	2.8	6.4	3.6	10.3	8.4
40	10.6	8.1	17.4	18.8	7.1	3.4	3.0	6.5	3.9	10.9	9.2
42	11.3	8.4	18.2	19.8	7.9	3.6	3.3	6.6	4.4	11.6	10.0
44	12.2	8.7	19.1	20.9	8.8	3.9	3.5	6.8	4.9	12.3	10.9
46	13.1	9.0	20.1	22.1	9.9	4.2	3.8	6.9	5.5	13.2	11.9
48	14.2	9.4	21.3	23.6	11.1	4.5	4.0	7.0	6.2	14.2	13.0
50	15.5	9.7	22.6	25.3	12.5	4.9	4.4	7.2	6.9	15.4	14.2
52	17.1	10.1	24.2	27.3	14.3	5.2	4.7	7.3	7.9	16.9	15.6
54	19.1	10.6	26.2	29.7	16.4	5.6	5.0	7.5	9.1	18.6	17.1
56	21.7	11.1	28.6	32.8	19.1	6.1	5.4	7.7	10.6	20.9	18.9
58	25.2	11.7	31.9	36.8	22.8	6.5	5.9	7.9	12.6	23.9	21.0
60	30.1	12.4	36.4	42.5	28.0	7.1	6.4	8.2	15.5	28.3	23.6
62	38.2	13.2	43.6	51.3	36.2	7.8	6.9	8.5	20.1	35.2	26.8
64	54.2	14.3	57.7	68.5	52.7	8.6	7.7	8.8	29.2	48.9	31.4
66	121.3	16.1	114.6	137.4	120.4	9.9	8.9	9.4	66.8	105.2	39.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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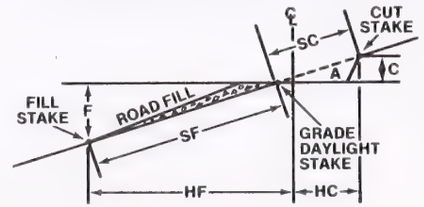
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

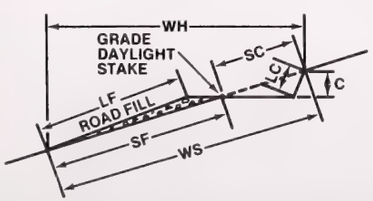
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 10 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.5	5.8	11.3	11.3	1.0	.7	.6	5.4	.6	5.8	1.5
12	5.7	5.9	11.6	11.6	1.2	.9	.7	5.5	.7	6.0	1.9
14	5.9	6.0	11.9	12.0	1.5	1.0	.8	5.6	.8	6.2	2.2
16	6.1	6.2	12.2	12.3	1.8	1.2	1.0	5.7	1.0	6.5	2.6
18	6.4	6.4	12.5	12.7	2.0	1.4	1.1	5.8	1.1	6.7	3.1
20	6.6	6.5	12.9	13.2	2.3	1.6	1.3	6.0	1.3	7.0	3.5
22	6.9	6.7	13.3	13.6	2.7	1.8	1.4	6.1	1.5	7.2	4.0
24	7.2	6.9	13.7	14.1	3.0	2.0	1.6	6.2	1.7	7.5	4.4
26	7.5	7.1	14.2	14.7	3.4	2.2	1.8	6.3	1.9	7.8	5.0
28	7.9	7.3	14.7	15.2	3.8	2.5	2.0	6.5	2.1	8.2	5.5
30	8.3	7.6	15.2	15.9	4.3	2.7	2.2	6.6	2.4	8.6	6.1
32	8.7	7.8	15.8	16.6	4.8	3.0	2.4	6.8	2.7	9.0	6.8
34	9.2	8.1	16.4	17.3	5.4	3.3	2.6	7.0	3.0	9.5	7.5
36	9.8	8.4	17.1	18.2	6.0	3.6	2.8	7.1	3.3	10.0	8.2
38	10.4	8.7	17.9	19.1	6.6	3.9	3.1	7.3	3.7	10.5	9.0
40	11.1	9.1	18.7	20.1	7.4	4.2	3.4	7.5	4.1	11.2	9.9
42	11.8	9.4	19.6	21.3	8.3	4.6	3.7	7.7	4.6	11.9	10.9
44	12.7	9.8	20.7	22.6	9.2	5.0	4.0	8.0	5.1	12.7	12.0
46	13.8	10.3	21.9	24.1	10.4	5.4	4.3	8.2	5.8	13.6	13.1
48	15.0	10.8	23.2	25.8	11.7	5.8	4.7	8.5	6.5	14.7	14.5
50	16.5	11.3	24.8	27.8	13.3	6.3	5.1	8.8	7.4	16.0	16.0
52	18.3	11.9	26.7	30.2	15.2	6.9	5.5	9.1	8.4	17.6	17.7
54	20.5	12.6	29.1	33.0	17.6	7.5	6.0	9.5	9.7	19.6	19.6
56	23.4	13.3	32.0	36.7	20.6	8.1	6.5	9.9	11.4	22.1	21.9
58	27.3	14.2	35.9	41.5	24.7	8.9	7.1	10.3	13.7	25.5	24.7
60	32.9	15.2	41.3	48.1	30.5	9.8	7.8	10.9	16.9	30.4	28.1
62	42.0	16.5	49.7	58.5	39.9	10.9	8.7	11.5	22.2	38.2	32.6
64	60.4	18.2	66.2	78.6	58.7	12.3	9.8	12.4	32.6	53.9	39.0
66	137.6	21.0	132.4	158.6	136.6	14.5	11.6	13.7	75.8	118.7	51.2

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
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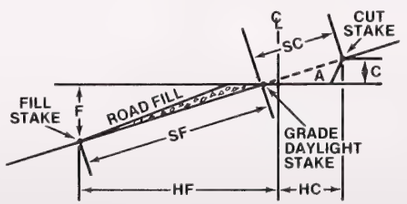
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

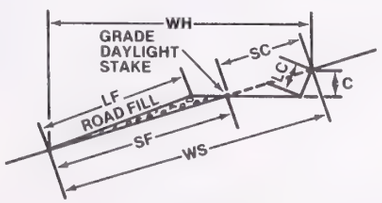
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 10 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.6	5.9	11.4	11.5	1.0	.8	.6	5.6	.6	5.8	1.5
12	5.8	6.1	11.8	11.8	1.2	1.0	.7	5.7	.7	6.0	1.9
14	6.0	6.2	12.1	12.2	1.5	1.2	.9	5.9	.8	6.2	2.3
16	6.2	6.4	12.5	12.6	1.8	1.4	1.0	6.0	1.0	6.5	2.7
18	6.5	6.6	12.9	13.1	2.1	1.7	1.2	6.2	1.1	6.7	3.1
20	6.7	6.8	13.3	13.6	2.4	1.9	1.3	6.3	1.3	7.0	3.6
22	7.0	7.1	13.8	14.1	2.7	2.2	1.5	6.5	1.5	7.3	4.1
24	7.4	7.3	14.3	14.7	3.1	2.4	1.7	6.7	1.7	7.6	4.6
26	7.7	7.6	14.8	15.3	3.5	2.7	1.9	6.9	1.9	7.9	5.2
28	8.1	7.9	15.4	16.0	3.9	3.0	2.1	7.1	2.2	8.3	5.8
30	8.5	8.2	16.0	16.7	4.4	3.3	2.4	7.4	2.5	8.7	6.5
32	9.0	8.5	16.7	17.6	5.0	3.7	2.6	7.6	2.7	9.1	7.2
34	9.5	8.9	17.5	18.5	5.5	4.1	2.9	7.9	3.1	9.6	8.0
36	10.1	9.3	18.3	19.5	6.2	4.5	3.2	8.2	3.4	10.2	8.9
38	10.8	9.8	19.2	20.6	6.9	4.9	3.5	8.5	3.8	10.8	9.8
40	11.6	10.2	20.2	21.8	7.7	5.4	3.8	8.8	4.3	11.4	10.8
42	12.4	10.8	21.4	23.2	8.7	5.9	4.2	9.2	4.8	12.2	12.0
44	13.4	11.4	22.7	24.8	9.8	6.5	4.6	9.6	5.4	13.1	13.3
46	14.6	12.0	24.2	26.6	11.0	7.1	5.0	10.0	6.1	14.2	14.8
48	16.0	12.7	25.9	28.7	12.5	7.8	5.5	10.5	6.9	15.4	16.4
50	17.6	13.5	27.9	31.2	14.2	8.6	6.1	11.1	7.9	16.8	18.3
52	19.7	14.5	30.3	34.1	16.4	9.4	6.7	11.7	9.1	18.6	20.5
54	22.3	15.5	33.2	37.8	19.1	10.4	7.4	12.4	10.6	20.9	23.1
56	25.6	16.7	36.9	42.3	22.5	11.6	8.2	13.2	12.5	23.8	26.3
58	30.1	18.2	41.8	48.3	27.3	12.9	9.1	14.1	15.1	27.7	30.2
60	36.8	20.0	48.7	56.8	34.1	14.5	10.3	15.3	18.9	33.4	35.1
62	47.7	22.2	59.4	69.8	45.3	16.5	11.7	16.7	25.1	42.7	41.9
64	69.8	25.2	80.0	95.0	67.8	19.2	13.6	18.6	37.6	61.4	52.0
66	163.6	30.4	161.9	194.0	162.4	23.7	16.8	21.8	90.1	140.2	72.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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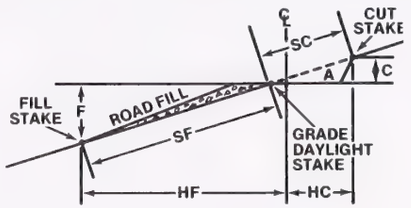
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

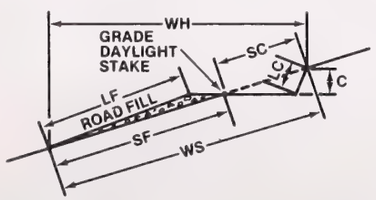
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 10 FEET

CUT SLOPE = 1.5 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	5.7	6.2	11.8	11.8	1.0	1.1	.6	5.9	.6	5.8	1.6
12	5.9	6.4	12.2	12.3	1.3	1.4	.8	6.1	.7	6.1	2.0
14	6.1	6.7	12.7	12.8	1.5	1.7	.9	6.4	.9	6.3	2.4
16	6.4	6.9	13.2	13.3	1.8	2.0	1.1	6.6	1.0	6.5	2.8
18	6.7	7.2	13.7	13.9	2.1	2.3	1.3	6.9	1.2	6.8	3.3
20	7.0	7.6	14.3	14.6	2.5	2.7	1.5	7.2	1.4	7.1	3.9
22	7.3	8.0	14.9	15.3	2.8	3.1	1.7	7.6	1.6	7.4	4.4
24	7.7	8.4	15.6	16.1	3.2	3.5	2.0	7.9	1.8	7.7	5.1
26	8.1	8.8	16.4	16.9	3.7	4.0	2.2	8.3	2.0	8.1	5.8
28	8.6	9.3	17.2	17.9	4.2	4.5	2.5	8.8	2.3	8.5	6.5
30	9.1	9.9	18.2	19.0	4.7	5.1	2.8	9.3	2.6	8.9	7.4
32	9.7	10.5	19.2	20.2	5.3	5.8	3.2	9.8	3.0	9.4	8.3
34	10.3	11.2	20.4	21.6	6.0	6.5	3.6	10.4	3.3	10.0	9.4
36	11.1	12.0	21.7	23.1	6.8	7.3	4.1	11.1	3.8	10.6	10.6
38	11.9	12.9	23.3	24.9	7.6	8.3	4.6	11.9	4.2	11.4	12.0
40	12.9	14.0	25.0	26.9	8.6	9.4	5.2	12.8	4.8	12.2	13.5
42	14.1	15.3	27.0	29.3	9.8	10.6	5.9	13.9	5.4	13.2	15.4
44	15.4	16.7	29.4	32.1	11.2	12.1	6.7	15.1	6.2	14.3	17.5
46	17.0	18.5	32.3	35.5	12.8	13.9	7.7	16.6	7.1	15.7	20.1
48	19.0	20.6	35.7	39.6	14.8	16.1	8.9	18.4	8.2	17.3	23.2
50	21.5	23.3	40.0	44.7	17.3	18.8	10.4	20.6	9.6	19.4	27.1
52	24.6	26.7	45.5	51.2	20.4	22.2	12.3	23.4	11.3	22.0	32.0
54	28.7	31.1	52.6	59.8	24.6	26.7	14.8	27.2	13.6	25.5	38.5
56	34.4	37.3	62.5	71.6	30.3	32.8	18.2	32.3	16.8	30.2	47.4
58	42.7	46.3	76.9	88.9	38.6	41.8	23.2	39.8	21.4	37.1	60.4
60	55.9	60.7	100.0	116.6	51.9	56.3	31.2	51.8	28.8	48.2	81.2
62	80.6	87.5	142.9	168.1	76.6	83.1	46.1	74.1	42.5	68.7	119.9
64	142.4	154.4	250.0	296.8	138.4	150.1	83.2	129.9	76.8	120.1	216.6
66	574.8	623.4	1000.0	1198.2	570.8	619.1	343.4	520.1	316.6	479.9	893.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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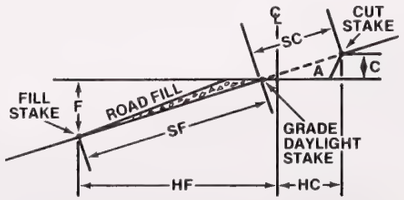
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

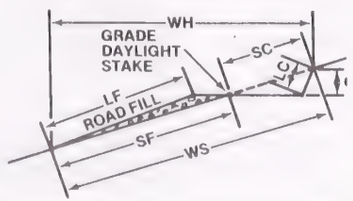
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 11 FEET

CUT SLOPE = VERTICAL

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.0	6.0	11.9	12.0	1.1	.6	.6	5.5	.6	6.4	1.8
12	6.1	6.0	12.1	12.2	1.3	.7	.7	5.5	.7	6.6	2.2
14	6.3	6.1	12.3	12.4	1.6	.8	.8	5.5	.9	6.8	2.6
16	6.5	6.2	12.5	12.7	1.9	1.0	1.0	5.5	1.0	7.0	3.0
18	6.7	6.3	12.8	13.0	2.2	1.1	1.1	5.5	1.2	7.3	3.4
20	7.0	6.3	13.1	13.3	2.5	1.2	1.2	5.5	1.4	7.6	3.9
22	7.2	6.4	13.3	13.6	2.8	1.4	1.4	5.5	1.6	7.8	4.3
24	7.5	6.5	13.6	14.0	3.2	1.5	1.5	5.5	1.8	8.1	4.8
26	7.8	6.6	13.9	14.4	3.5	1.7	1.7	5.5	2.0	8.4	5.3
28	8.1	6.7	14.3	14.8	3.9	1.8	1.8	5.5	2.2	8.8	5.8
30	8.5	6.8	14.7	15.3	4.4	2.0	2.0	5.5	2.4	9.2	6.4
32	8.9	6.9	15.1	15.8	4.9	2.1	2.1	5.5	2.7	9.6	7.0
34	9.3	7.1	15.5	16.4	5.4	2.3	2.3	5.5	3.0	10.0	7.6
36	9.8	7.2	16.0	17.0	6.0	2.4	2.4	5.5	3.3	10.5	8.2
38	10.3	7.3	16.5	17.6	6.6	2.6	2.6	5.5	3.7	11.0	8.9
40	10.9	7.5	17.1	18.4	7.3	2.8	2.8	5.5	4.1	11.6	9.7
42	11.6	7.6	17.7	19.2	8.1	3.0	3.0	5.5	4.5	12.2	10.4
44	12.4	7.8	18.5	20.2	9.0	3.1	3.1	5.5	5.0	13.0	11.3
46	13.2	8.0	19.3	21.2	10.0	3.3	3.3	5.5	5.5	13.8	12.2
48	14.3	8.2	20.3	22.5	11.1	3.5	3.5	5.5	6.2	14.8	13.1
50	15.5	8.4	21.4	23.9	12.5	3.8	3.8	5.5	6.9	15.9	14.2
52	17.0	8.7	22.8	25.7	14.2	4.0	4.0	5.5	7.8	17.3	15.3
54	18.9	8.9	24.4	27.8	16.2	4.2	4.2	5.5	9.0	18.9	16.6
56	21.2	9.2	26.6	30.4	18.7	4.5	4.5	5.5	10.4	21.1	18.1
58	24.4	9.5	29.4	33.9	22.1	4.8	4.8	5.5	12.2	23.9	19.8
60	29.0	9.9	33.3	38.9	26.9	5.1	5.1	5.5	14.9	27.8	21.8
62	36.3	10.4	39.7	46.7	34.4	5.5	5.5	5.5	19.1	34.2	24.2
64	50.8	11.0	52.1	61.9	49.4	5.9	5.9	5.5	27.4	46.6	27.6
66	111.3	12.1	102.9	123.3	110.5	6.6	6.6	5.5	61.3	97.4	33.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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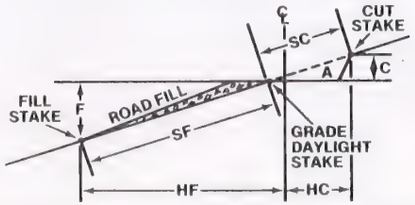
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

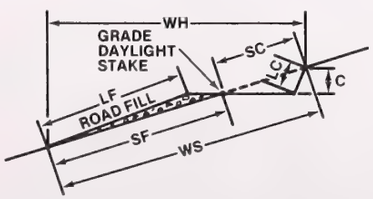
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 11 FEET

CUT SLOPE = .10 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.0	6.0	12.0	12.0	1.1	.6	.6	5.6	.6	6.4	1.8
12	6.2	6.1	12.2	12.3	1.3	.7	.7	5.6	.7	6.6	2.2
14	6.4	6.2	12.4	12.5	1.6	.9	.9	5.6	.9	6.8	2.6
16	6.6	6.3	12.7	12.8	1.9	1.0	1.0	5.6	1.0	7.1	3.0
18	6.8	6.3	12.9	13.1	2.2	1.1	1.1	5.6	1.2	7.3	3.4
20	7.0	6.4	13.2	13.5	2.5	1.3	1.3	5.6	1.4	7.6	3.9
22	7.3	6.5	13.5	13.8	2.8	1.4	1.4	5.6	1.6	7.8	4.4
24	7.6	6.6	13.8	14.2	3.2	1.6	1.5	5.7	1.8	8.1	4.9
26	7.9	6.7	14.1	14.6	3.6	1.7	1.7	5.7	2.0	8.5	5.4
28	8.2	6.9	14.5	15.1	4.0	1.9	1.9	5.7	2.2	8.8	5.9
30	8.6	7.0	14.9	15.5	4.4	2.0	2.0	5.7	2.5	9.2	6.5
32	9.0	7.1	15.3	16.1	4.9	2.2	2.2	5.7	2.7	9.6	7.1
34	9.4	7.3	15.8	16.7	5.5	2.3	2.3	5.7	3.0	10.0	7.8
36	9.9	7.4	16.3	17.3	6.0	2.5	2.5	5.8	3.3	10.5	8.4
38	10.4	7.6	16.8	18.0	6.7	2.7	2.7	5.8	3.7	11.1	9.1
40	11.1	7.7	17.4	18.8	7.4	2.9	2.9	5.8	4.1	11.7	9.9
42	11.7	7.9	18.1	19.7	8.2	3.1	3.1	5.8	4.5	12.3	10.7
44	12.5	8.1	18.9	20.7	9.1	3.3	3.3	5.8	5.1	13.1	11.6
46	13.5	8.3	19.8	21.8	10.1	3.5	3.5	5.8	5.6	13.9	12.5
48	14.5	8.5	20.8	23.1	11.3	3.7	3.7	5.9	6.3	14.9	13.6
50	15.8	8.8	22.0	24.6	12.7	4.0	3.9	5.9	7.1	16.1	14.7
52	17.3	9.1	23.4	26.4	14.4	4.2	4.2	5.9	8.0	17.5	15.9
54	19.2	9.4	25.2	28.6	16.5	4.5	4.4	5.9	9.1	19.2	17.3
56	21.7	9.7	27.4	31.4	19.1	4.8	4.7	6.0	10.6	21.4	18.9
58	25.0	10.1	30.3	35.0	22.6	5.1	5.0	6.0	12.5	24.3	20.7
60	29.7	10.5	34.4	40.1	27.5	5.4	5.4	6.0	15.3	28.4	22.8
62	37.2	11.0	41.0	48.2	35.3	5.8	5.8	6.1	19.6	34.9	25.5
64	52.3	11.7	53.9	64.0	50.8	6.3	6.3	6.1	28.2	47.8	29.2
66	114.8	12.9	106.5	127.7	114.0	7.1	7.1	6.2	63.2	100.3	35.6

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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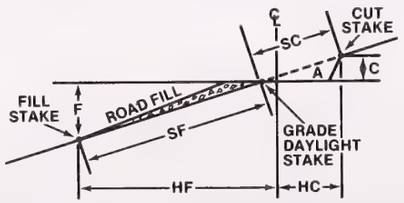
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

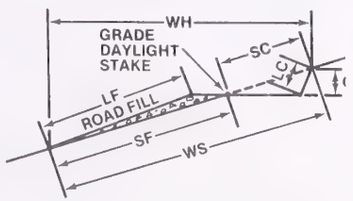
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 11 FEET

CUT SLOPE = .25 TO 1

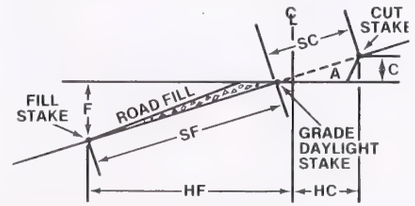
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.0	6.1	12.0	12.1	1.1	.6	.6	5.7	.6	6.4	1.8
12	6.2	6.2	12.3	12.4	1.3	.8	.7	5.7	.7	6.6	2.2
14	6.4	6.3	12.5	12.7	1.6	.9	.9	5.7	.9	6.8	2.6
16	6.6	6.4	12.8	13.0	1.9	1.0	1.0	5.8	1.0	7.1	3.0
18	6.8	6.5	13.1	13.3	2.2	1.2	1.1	5.8	1.2	7.3	3.5
20	7.1	6.6	13.4	13.7	2.5	1.3	1.3	5.8	1.4	7.6	4.0
22	7.3	6.7	13.7	14.1	2.8	1.5	1.4	5.9	1.6	7.9	4.5
24	7.6	6.8	14.1	14.5	3.2	1.6	1.6	5.9	1.8	8.2	5.0
26	8.0	7.0	14.4	14.9	3.6	1.8	1.8	5.9	2.0	8.5	5.5
28	8.3	7.1	14.8	15.4	4.0	2.0	1.9	6.0	2.2	8.9	6.1
30	8.7	7.3	15.3	15.9	4.5	2.1	2.1	6.0	2.5	9.2	6.7
32	9.1	7.4	15.7	16.5	5.0	2.3	2.3	6.1	2.8	9.7	7.3
34	9.6	7.6	16.2	17.1	5.5	2.5	2.4	6.1	3.1	10.1	8.0
36	10.1	7.8	16.8	17.8	6.1	2.7	2.6	6.2	3.4	10.6	8.7
38	10.6	8.0	17.4	18.6	6.8	2.9	2.8	6.2	3.8	11.2	9.5
40	11.3	8.2	18.0	19.4	7.5	3.1	3.0	6.3	4.2	11.8	10.3
42	12.0	8.4	18.8	20.4	8.4	3.3	3.2	6.3	4.6	12.5	11.2
44	12.8	8.6	19.6	21.4	9.3	3.6	3.5	6.4	5.2	13.3	12.1
46	13.8	8.9	20.6	22.6	10.4	3.8	3.7	6.4	5.8	14.1	13.2
48	14.9	9.1	21.7	24.0	11.6	4.1	3.9	6.5	6.5	15.2	14.3
50	16.2	9.4	22.9	25.7	13.1	4.3	4.2	6.6	7.3	16.4	15.5
52	17.9	9.7	24.5	27.6	14.8	4.6	4.5	6.6	8.2	17.9	16.9
54	19.9	10.1	26.3	29.9	17.0	4.9	4.8	6.7	9.4	19.6	18.4
56	22.4	10.5	28.7	32.9	19.7	5.3	5.1	6.8	11.0	21.9	20.2
58	25.9	10.9	31.8	36.8	23.4	5.7	5.5	6.9	13.0	25.0	22.2
60	30.8	11.5	36.3	42.3	28.6	6.1	5.9	7.0	15.9	29.3	24.7
62	38.8	12.1	43.2	50.9	36.8	6.6	6.4	7.1	20.4	36.1	27.7
64	54.7	12.9	57.0	67.6	53.1	7.2	7.0	7.2	29.5	49.7	31.9
66	120.8	14.3	112.8	135.1	119.9	8.1	7.9	7.5	66.5	105.3	39.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

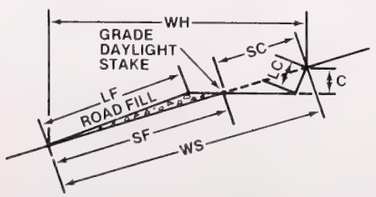
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 11 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.1	6.2	12.2	12.3	1.1	.7	.6	5.8	.6	6.4	1.8
12	6.3	6.3	12.5	12.6	1.3	.8	.8	5.9	.7	6.6	2.2
14	6.5	6.5	12.8	12.9	1.6	1.0	.9	5.9	.9	6.8	2.7
16	6.7	6.6	13.1	13.3	1.9	1.2	1.0	6.0	1.1	7.1	3.1
18	6.9	6.7	13.4	13.7	2.2	1.3	1.2	6.1	1.2	7.3	3.6
20	7.2	6.9	13.8	14.1	2.5	1.5	1.3	6.2	1.4	7.6	4.1
22	7.5	7.0	14.2	14.5	2.9	1.7	1.5	6.3	1.6	7.9	4.6
24	7.8	7.2	14.6	15.0	3.3	1.9	1.7	6.3	1.8	8.2	5.2
26	8.1	7.4	15.0	15.5	3.7	2.1	1.9	6.4	2.0	8.6	5.8
28	8.5	7.6	15.5	16.0	4.1	2.3	2.0	6.5	2.3	8.9	6.4
30	8.9	7.8	15.9	16.6	4.6	2.5	2.2	6.6	2.6	9.3	7.0
32	9.3	8.0	16.5	17.3	5.1	2.7	2.4	6.7	2.8	9.8	7.7
34	9.8	8.2	17.1	18.0	5.7	2.9	2.6	6.8	3.2	10.2	8.5
36	10.4	8.4	17.7	18.8	6.3	3.2	2.9	6.9	3.5	10.8	9.3
38	11.0	8.7	18.4	19.7	7.0	3.5	3.1	7.0	3.9	11.4	10.2
40	11.7	9.0	19.2	20.7	7.8	3.7	3.3	7.2	4.3	12.0	11.1
42	12.5	9.3	20.0	21.7	8.7	4.0	3.6	7.3	4.8	12.7	12.1
44	13.4	9.6	21.0	23.0	9.7	4.3	3.9	7.4	5.4	13.6	13.2
46	14.4	9.9	22.1	24.3	10.9	4.6	4.1	7.6	6.0	14.5	14.4
48	15.6	10.3	23.4	25.9	12.2	5.0	4.5	7.7	6.8	15.6	15.7
50	17.1	10.7	24.9	27.8	13.8	5.4	4.8	7.9	7.6	17.0	17.2
52	18.9	11.1	26.6	30.0	15.7	5.8	5.1	8.1	8.7	18.5	18.8
54	21.0	11.6	28.8	32.7	18.0	6.2	5.5	8.3	10.0	20.5	20.7
56	23.9	12.2	31.5	36.1	21.0	6.7	6.0	8.5	11.7	23.0	22.9
58	27.7	12.8	35.0	40.5	25.0	7.2	6.4	8.7	13.9	26.3	25.4
60	33.1	13.6	40.1	46.7	30.7	7.8	7.0	9.0	17.1	31.1	28.5
62	42.0	14.5	48.0	56.5	39.9	8.5	7.6	9.3	22.1	38.7	32.5
64	59.7	15.7	63.5	75.4	58.0	9.5	8.5	9.7	32.2	53.7	38.0
66	133.4	17.7	126.1	151.1	132.5	10.9	9.7	10.4	73.5	115.7	48.1

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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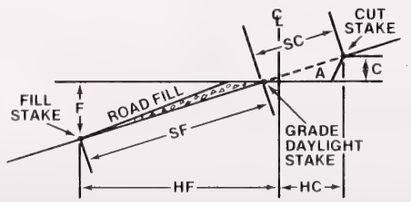
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

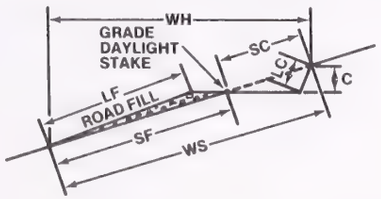
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 11 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.1	6.3	12.4	12.4	1.1	.8	.6	6.0	.6	6.4	1.8
12	6.3	6.5	12.7	12.8	1.4	1.0	.8	6.1	.8	6.6	2.3
14	6.5	6.7	13.0	13.2	1.6	1.2	.9	6.2	.9	6.9	2.7
16	6.8	6.8	13.4	13.6	1.9	1.3	1.1	6.3	1.1	7.1	3.2
18	7.0	7.0	13.8	14.0	2.2	1.5	1.2	6.4	1.2	7.4	3.7
20	7.3	7.2	14.2	14.5	2.6	1.8	1.4	6.6	1.4	7.6	4.2
22	7.6	7.4	14.6	15.0	2.9	2.0	1.6	6.7	1.6	8.0	4.8
24	7.9	7.6	15.1	15.5	3.3	2.2	1.8	6.8	1.9	8.3	5.4
26	8.3	7.8	15.6	16.1	3.8	2.5	2.0	7.0	2.1	8.6	6.0
28	8.7	8.1	16.1	16.8	4.2	2.7	2.2	7.1	2.3	9.0	6.7
30	9.1	8.3	16.7	17.5	4.7	3.0	2.4	7.3	2.6	9.4	7.4
32	9.6	8.6	17.4	18.2	5.3	3.3	2.6	7.5	2.9	9.9	8.2
34	10.1	8.9	18.1	19.1	5.9	3.6	2.9	7.7	3.3	10.4	9.0
36	10.7	9.2	18.8	20.0	6.6	3.9	3.1	7.8	3.6	11.0	9.9
38	11.4	9.6	19.6	21.0	7.3	4.3	3.4	8.1	4.1	11.6	10.9
40	12.2	10.0	20.6	22.1	8.1	4.6	3.7	8.3	4.5	12.3	12.0
42	13.0	10.4	21.6	23.4	9.1	5.0	4.0	8.5	5.0	13.1	13.2
44	14.0	10.8	22.7	24.8	10.2	5.5	4.4	8.8	5.6	14.0	14.5
46	15.2	11.3	24.0	26.5	11.4	5.9	4.7	9.0	6.3	15.0	15.9
48	16.5	11.8	25.6	28.4	12.9	6.4	5.1	9.3	7.1	16.2	17.5
50	18.1	12.4	27.3	30.5	14.6	6.9	5.6	9.7	8.1	17.7	19.3
52	20.1	13.1	29.4	33.2	16.7	7.5	6.0	10.0	9.3	19.4	21.4
54	22.5	13.8	32.0	36.4	19.3	8.2	6.6	10.4	10.7	21.6	23.7
56	25.7	14.6	35.2	40.4	22.6	8.9	7.2	10.9	12.6	24.3	26.5
58	30.0	15.6	39.4	45.6	27.1	9.8	7.8	11.4	15.0	28.1	29.9
60	36.2	16.7	45.4	52.9	33.6	10.8	8.6	12.0	18.6	33.4	34.0
62	46.2	18.1	54.7	64.4	43.9	11.9	9.6	12.7	24.4	42.0	39.4
64	66.5	20.0	72.8	86.5	64.6	13.5	10.8	13.6	35.8	59.3	47.2
66	151.4	23.1	145.6	174.5	150.3	15.9	12.7	15.0	83.4	130.6	62.0

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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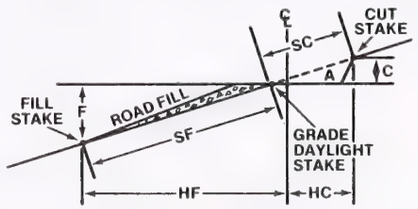
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

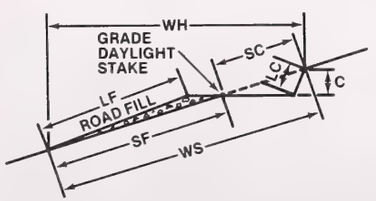
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 11 FEET

CUT SLOPE = 1.0 TO 1

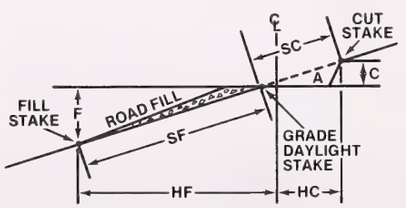
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.1	6.5	12.6	12.6	1.1	.9	.6	6.1	.6	6.4	1.9
12	6.4	6.7	12.9	13.0	1.4	1.1	.8	6.3	.8	6.6	2.3
14	6.6	6.9	13.3	13.5	1.6	1.3	1.0	6.5	.9	6.9	2.8
16	6.8	7.1	13.7	13.9	2.0	1.6	1.1	6.6	1.1	7.1	3.3
18	7.1	7.3	14.2	14.4	2.3	1.8	1.3	6.8	1.3	7.4	3.8
20	7.4	7.5	14.7	14.9	2.6	2.1	1.5	7.0	1.5	7.7	4.4
22	7.7	7.8	15.2	15.5	3.0	2.4	1.7	7.2	1.7	8.0	5.0
24	8.1	8.1	15.7	16.2	3.4	2.7	1.9	7.4	1.9	8.3	5.6
26	8.5	8.4	16.3	16.9	3.9	3.0	2.1	7.6	2.1	8.7	6.3
28	8.9	8.7	16.9	17.6	4.3	3.3	2.3	7.8	2.4	9.1	7.0
30	9.4	9.0	17.6	18.4	4.9	3.7	2.6	8.1	2.7	9.5	7.9
32	9.9	9.4	18.4	19.3	5.4	4.1	2.9	8.4	3.0	10.0	8.7
34	10.5	9.8	19.2	20.3	6.1	4.5	3.2	8.7	3.4	10.6	9.7
36	11.2	10.3	20.1	21.4	6.8	4.9	3.5	9.0	3.8	11.2	10.7
38	11.9	10.7	21.1	22.6	7.6	5.4	3.8	9.3	4.2	11.8	11.9
40	12.7	11.3	22.3	24.0	8.5	5.9	4.2	9.7	4.7	12.6	13.1
42	13.7	11.8	23.5	25.5	9.5	6.5	4.6	10.1	5.3	13.4	14.5
44	14.8	12.5	25.0	27.3	10.7	7.1	5.0	10.5	6.0	14.4	16.1
46	16.1	13.2	26.6	29.3	12.1	7.8	5.5	11.0	6.7	15.6	17.9
48	17.6	14.0	28.5	31.6	13.7	8.6	6.1	11.6	7.6	16.9	19.9
50	19.4	14.9	30.7	34.3	15.7	9.4	6.7	12.2	8.7	18.5	22.2
52	21.7	15.9	33.3	37.6	18.0	10.4	7.3	12.8	10.0	20.5	24.8
54	24.5	17.1	36.6	41.5	21.0	11.5	8.1	13.6	11.6	22.9	28.0
56	28.2	18.4	40.6	46.6	24.8	12.7	9.0	14.5	13.8	26.1	31.8
58	33.2	20.0	46.0	53.2	30.0	14.2	10.0	15.5	16.6	30.5	36.5
60	40.5	22.0	53.5	62.4	37.5	16.0	11.3	16.8	20.8	36.7	42.5
62	52.4	24.4	65.3	76.8	49.8	18.2	12.9	18.4	27.6	46.9	50.7
64	76.8	27.7	88.0	104.5	74.6	21.2	15.0	20.5	41.4	67.6	62.9
66	179.9	33.5	178.1	213.4	178.7	26.1	18.4	23.9	99.1	154.2	87.6

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

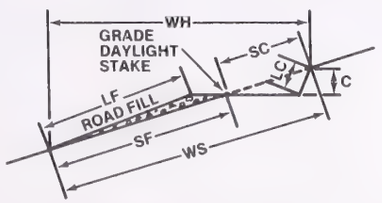
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 11 FEET

CUT SLOPE = 1.5 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.2	6.8	12.9	13.0	1.1	1.2	.7	6.5	.6	6.4	1.9
12	6.5	7.0	13.4	13.5	1.4	1.5	.8	6.8	.8	6.7	2.4
14	6.7	7.3	13.9	14.1	1.7	1.8	1.0	7.0	.9	6.9	2.9
16	7.0	7.6	14.5	14.7	2.0	2.2	1.2	7.3	1.1	7.2	3.4
18	7.3	8.0	15.1	15.3	2.3	2.5	1.4	7.6	1.3	7.5	4.0
20	7.7	8.3	15.7	16.0	2.7	2.9	1.6	8.0	1.5	7.8	4.7
22	8.1	8.7	16.4	16.8	3.1	3.4	1.9	8.3	1.7	8.1	5.4
24	8.5	9.2	17.2	17.7	3.6	3.9	2.1	8.7	2.0	8.5	6.1
26	8.9	9.7	18.0	18.6	4.1	4.4	2.4	9.2	2.2	8.9	7.0
28	9.4	10.2	19.0	19.7	4.6	5.0	2.8	9.6	2.5	9.3	7.9
30	10.0	10.9	20.0	20.9	5.2	5.6	3.1	10.2	2.9	9.8	8.9
32	10.7	11.6	21.2	22.2	5.9	6.3	3.5	10.8	3.2	10.4	10.1
34	11.4	12.3	22.4	23.7	6.6	7.2	4.0	11.5	3.7	11.0	11.4
36	12.2	13.2	23.9	25.4	7.4	8.1	4.5	12.2	4.1	11.7	12.8
38	13.1	14.2	25.6	27.4	8.4	9.1	5.1	13.1	4.7	12.5	14.5
40	14.2	15.4	27.5	29.6	9.5	10.3	5.7	14.1	5.3	13.4	16.4
42	15.5	16.8	29.7	32.2	10.8	11.7	6.5	15.2	6.0	14.5	18.6
44	17.0	18.4	32.4	35.3	12.3	13.4	7.4	16.6	6.8	15.7	21.2
46	18.7	20.3	35.5	39.1	14.1	15.3	8.5	18.2	7.8	17.2	24.3
48	20.9	22.7	39.3	43.6	16.3	17.7	9.8	20.2	9.0	19.1	28.1
50	23.6	25.6	44.0	49.2	19.0	20.6	11.4	22.7	10.6	21.3	32.8
52	27.0	29.3	50.0	56.4	22.5	24.4	13.5	25.8	12.5	24.2	38.7
54	31.6	34.2	57.9	65.8	27.0	29.3	16.3	29.9	15.0	28.0	46.5
56	37.8	41.0	68.7	78.8	33.3	36.1	20.0	35.5	18.5	33.2	57.3
58	46.9	50.9	84.6	97.8	42.4	46.0	25.5	43.8	23.5	40.8	73.1
60	61.5	66.7	110.0	128.3	57.1	61.9	34.3	57.0	31.7	53.0	98.3
62	88.7	96.2	157.1	184.9	84.3	91.4	50.7	81.5	46.7	75.6	145.1
64	156.6	169.9	275.0	326.5	152.2	165.1	91.6	142.9	84.4	132.1	262.1
66	632.2	685.8	1100.0	1318.0	627.8	681.0	377.7	572.1	348.3	527.9	1081.0

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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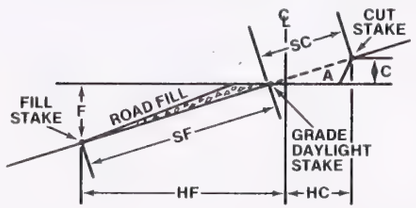
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

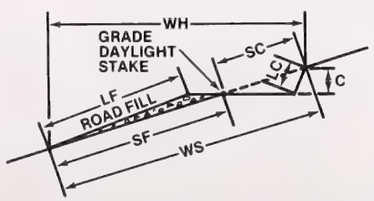
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 12 FEET

CUT SLOPE = VERTICAL

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.5	6.5	13.0	13.0	1.2	.6	.6	6.0	.6	7.0	2.1
12	6.7	6.6	13.2	13.3	1.4	.8	.8	6.0	.8	7.2	2.6
14	6.9	6.7	13.4	13.6	1.7	.9	.9	6.0	1.0	7.4	3.0
16	7.1	6.7	13.7	13.9	2.0	1.1	1.1	6.0	1.1	7.7	3.5
18	7.4	6.8	14.0	14.2	2.4	1.2	1.2	6.0	1.3	8.0	4.1
20	7.6	6.9	14.2	14.5	2.7	1.4	1.4	6.0	1.5	8.2	4.6
22	7.9	7.0	14.5	14.9	3.1	1.5	1.5	6.0	1.7	8.5	5.1
24	8.2	7.1	14.9	15.3	3.4	1.7	1.7	6.0	1.9	8.9	5.7
26	8.5	7.2	15.2	15.7	3.9	1.8	1.8	6.0	2.1	9.2	6.3
28	8.9	7.3	15.6	16.2	4.3	2.0	2.0	6.0	2.4	9.6	7.0
30	9.3	7.4	16.0	16.7	4.8	2.1	2.1	6.0	2.7	10.0	7.6
32	9.7	7.6	16.4	17.2	5.3	2.3	2.3	6.0	2.9	10.4	8.3
34	10.1	7.7	16.9	17.8	5.9	2.5	2.5	6.0	3.3	10.9	9.0
36	10.7	7.8	17.4	18.5	6.5	2.7	2.7	6.0	3.6	11.4	9.8
38	11.2	8.0	18.0	19.2	7.2	2.8	2.8	6.0	4.0	12.0	10.6
40	11.9	8.2	18.6	20.1	8.0	3.0	3.0	6.0	4.4	12.6	11.5
42	12.6	8.3	19.3	21.0	8.8	3.2	3.2	6.0	4.9	13.3	12.4
44	13.5	8.5	20.1	22.0	9.8	3.4	3.4	6.0	5.4	14.1	13.4
46	14.5	8.7	21.1	23.2	10.9	3.6	3.6	6.0	6.0	15.1	14.5
48	15.6	8.9	22.1	24.5	12.2	3.9	3.9	6.0	6.7	16.1	15.6
50	16.9	9.2	23.4	26.1	13.7	4.1	4.1	6.0	7.6	17.4	16.9
52	18.6	9.4	24.8	28.0	15.4	4.4	4.4	6.0	8.6	18.8	18.2
54	20.6	9.7	26.7	30.3	17.6	4.6	4.6	6.0	9.8	20.7	19.8
56	23.2	10.0	29.0	33.2	20.4	4.9	4.9	6.0	11.3	23.0	21.5
58	26.6	10.4	32.0	37.0	24.1	5.2	5.2	6.0	13.4	26.0	23.5
60	31.6	10.8	36.4	42.4	29.3	5.6	5.6	6.0	16.3	30.4	25.9
62	39.6	11.4	43.3	50.9	37.6	6.0	6.0	6.0	20.8	37.3	28.8
64	55.5	12.0	56.8	67.5	53.9	6.5	6.5	6.0	29.9	50.8	32.8
66	121.4	13.2	112.3	134.5	120.5	7.3	7.3	6.0	66.9	106.3	39.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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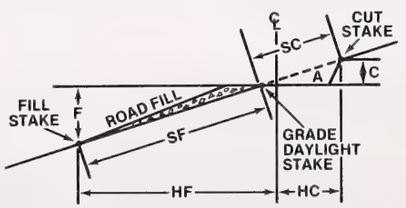
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

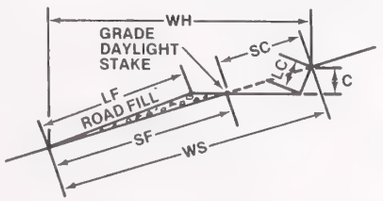
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 12 FEET

CUT SLOPE = .10 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.5	6.6	13.0	13.1	1.2	.7	.7	6.1	.7	7.0	2.1
12	6.7	6.6	13.3	13.4	1.4	.8	.8	6.1	.8	7.2	2.6
14	6.9	6.7	13.5	13.7	1.7	.9	.9	6.1	1.0	7.4	3.1
16	7.2	6.8	13.8	14.0	2.0	1.1	1.1	6.1	1.1	7.7	3.6
18	7.4	6.9	14.1	14.3	2.4	1.2	1.2	6.1	1.3	8.0	4.1
20	7.7	7.0	14.4	14.7	2.7	1.4	1.4	6.1	1.5	8.3	4.6
22	7.9	7.1	14.7	15.1	3.1	1.5	1.5	6.2	1.7	8.6	5.2
24	8.2	7.2	15.1	15.5	3.5	1.7	1.7	6.2	1.9	8.9	5.8
26	8.6	7.4	15.4	15.9	3.9	1.9	1.9	6.2	2.2	9.2	6.4
28	8.9	7.5	15.8	16.4	4.3	2.0	2.0	6.2	2.4	9.6	7.1
30	9.3	7.6	16.2	17.0	4.8	2.2	2.2	6.2	2.7	10.0	7.8
32	9.8	7.8	16.7	17.5	5.4	2.4	2.4	6.2	3.0	10.5	8.5
34	10.3	7.9	17.2	18.2	5.9	2.6	2.5	6.3	3.3	11.0	9.2
36	10.8	8.1	17.8	18.9	6.6	2.8	2.7	6.3	3.7	11.5	10.0
38	11.4	8.3	18.4	19.6	7.3	2.9	2.9	6.3	4.0	12.1	10.9
40	12.1	8.4	19.0	20.5	8.1	3.2	3.1	6.3	4.5	12.7	11.8
42	12.8	8.6	19.8	21.5	8.9	3.4	3.3	6.3	5.0	13.4	12.8
44	13.7	8.8	20.6	22.5	9.9	3.6	3.6	6.4	5.5	14.3	13.8
46	14.7	9.1	21.6	23.8	11.1	3.8	3.8	6.4	6.1	15.2	14.9
48	15.8	9.3	22.7	25.2	12.4	4.1	4.0	6.4	6.9	16.3	16.1
50	17.2	9.6	24.0	26.8	13.9	4.3	4.3	6.4	7.7	17.6	17.5
52	18.9	9.9	25.5	28.8	15.7	4.6	4.6	6.5	8.7	19.1	18.9
54	21.0	10.2	27.4	31.2	18.0	4.9	4.8	6.5	10.0	21.0	20.6
56	23.7	10.6	29.8	34.2	20.8	5.2	5.2	6.5	11.6	23.3	22.4
58	27.2	11.0	33.0	38.2	24.6	5.5	5.5	6.6	13.7	26.5	24.6
60	32.4	11.4	37.6	43.8	30.0	5.9	5.9	6.6	16.6	31.0	27.2
62	40.6	12.0	44.7	52.6	38.5	6.4	6.3	6.6	21.4	38.1	30.4
64	57.0	12.8	58.8	69.8	55.4	6.9	6.9	6.7	30.7	52.1	34.7
66	125.2	14.1	116.2	139.3	124.3	7.8	7.7	6.8	69.0	109.5	42.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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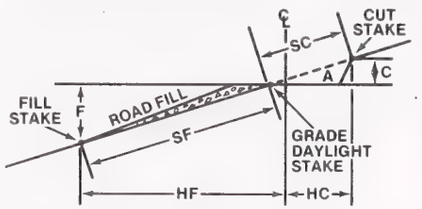
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

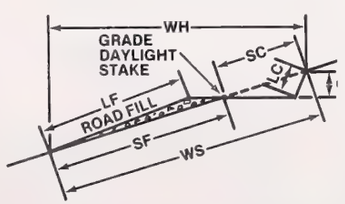
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 12 FEET

CUT SLOPE = .25 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.6	6.6	13.1	13.2	1.2	.7	.7	6.2	.7	7.0	2.1
12	6.8	6.7	13.4	13.5	1.5	.8	.8	6.2	.8	7.2	2.6
14	7.0	6.8	13.7	13.8	1.7	1.0	.9	6.2	1.0	7.5	3.1
16	7.2	7.0	14.0	14.2	2.1	1.1	1.1	6.3	1.1	7.7	3.6
18	7.5	7.1	14.3	14.5	2.4	1.3	1.3	6.3	1.3	8.0	4.2
20	7.7	7.2	14.6	14.9	2.7	1.5	1.4	6.4	1.5	8.3	4.7
22	8.0	7.3	15.0	15.3	3.1	1.6	1.6	6.4	1.7	8.6	5.3
24	8.3	7.5	15.4	15.8	3.5	1.8	1.7	6.4	1.9	8.9	5.9
26	8.7	7.6	15.8	16.3	3.9	2.0	1.9	6.5	2.2	9.3	6.6
28	9.1	7.8	16.2	16.8	4.4	2.2	2.1	6.5	2.4	9.7	7.3
30	9.5	7.9	16.6	17.4	4.9	2.3	2.3	6.6	2.7	10.1	8.0
32	9.9	8.1	17.2	18.0	5.4	2.5	2.5	6.6	3.0	10.5	8.7
34	10.4	8.3	17.7	18.7	6.0	2.7	2.7	6.7	3.4	11.0	9.5
36	11.0	8.5	18.3	19.4	6.7	3.0	2.9	6.7	3.7	11.6	10.4
38	11.6	8.7	19.0	20.3	7.4	3.2	3.1	6.8	4.1	12.2	11.3
40	12.3	8.9	19.7	21.2	8.2	3.4	3.3	6.8	4.6	12.9	12.3
42	13.1	9.1	20.5	22.2	9.1	3.6	3.5	6.9	5.1	13.6	13.3
44	14.0	9.4	21.4	23.4	10.2	3.9	3.8	6.9	5.6	14.5	14.4
46	15.0	9.7	22.4	24.7	11.3	4.2	4.0	7.0	6.3	15.4	15.7
48	16.3	10.0	23.6	26.2	12.7	4.4	4.3	7.1	7.0	16.6	17.0
50	17.7	10.3	25.0	28.0	14.3	4.7	4.6	7.1	7.9	17.9	18.5
52	19.5	10.6	26.7	30.1	16.2	5.1	4.9	7.2	9.0	19.5	20.1
54	21.7	11.0	28.7	32.7	18.6	5.4	5.2	7.3	10.3	21.4	21.9
56	24.5	11.4	31.3	35.9	21.5	5.8	5.6	7.4	11.9	23.9	24.0
58	28.2	11.9	34.7	40.2	25.5	6.2	6.0	7.5	14.2	27.2	26.4
60	33.6	12.5	39.6	46.1	31.2	6.6	6.4	7.6	17.3	31.9	29.3
62	42.3	13.2	47.2	55.5	40.2	7.2	7.0	7.7	22.3	39.4	33.0
64	59.7	14.1	62.1	73.8	58.0	7.8	7.6	7.9	32.2	54.2	38.0
66	131.8	15.6	123.0	147.4	130.9	8.9	8.6	8.2	72.6	114.9	47.0

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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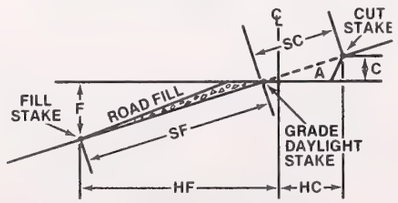
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

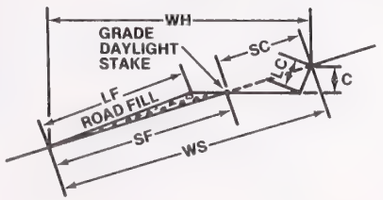
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 12 FEET

CUT SLOPE = .50 TO 1

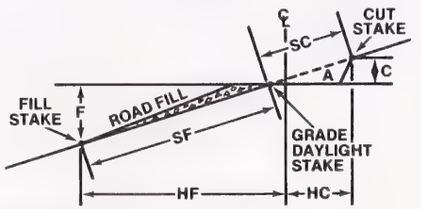
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.6	6.8	13.3	13.4	1.2	.8	.7	6.3	.7	7.0	2.2
12	6.8	6.9	13.6	13.7	1.5	.9	.8	6.4	.8	7.2	2.7
14	7.0	7.0	14.0	14.1	1.8	1.1	1.0	6.5	1.0	7.5	3.2
16	7.3	7.2	14.3	14.5	2.1	1.3	1.1	6.6	1.2	7.7	3.7
18	7.6	7.3	14.7	14.9	2.4	1.5	1.3	6.7	1.3	8.0	4.3
20	7.8	7.5	15.0	15.3	2.8	1.6	1.5	6.7	1.5	8.3	4.9
22	8.2	7.7	15.5	15.8	3.2	1.8	1.6	6.8	1.8	8.6	5.5
24	8.5	7.9	15.9	16.3	3.6	2.0	1.8	6.9	2.0	9.0	6.2
26	8.9	8.0	16.4	16.9	4.0	2.3	2.0	7.0	2.2	9.3	6.9
28	9.3	8.2	16.9	17.5	4.5	2.5	2.2	7.1	2.5	9.7	7.6
30	9.7	8.5	17.4	18.2	5.0	2.7	2.4	7.2	2.8	10.2	8.4
32	10.2	8.7	18.0	18.9	5.6	3.0	2.6	7.3	3.1	10.7	9.2
34	10.7	8.9	18.6	19.7	6.2	3.2	2.9	7.4	3.5	11.2	10.1
36	11.3	9.2	19.3	20.5	6.9	3.5	3.1	7.6	3.8	11.8	11.1
38	12.0	9.5	20.1	21.5	7.7	3.8	3.4	7.7	4.3	12.4	12.1
40	12.8	9.8	20.9	22.5	8.5	4.1	3.6	7.8	4.7	13.1	13.2
42	13.6	10.1	21.9	23.7	9.5	4.4	3.9	8.0	5.3	13.9	14.4
44	14.6	10.4	22.9	25.0	10.6	4.7	4.2	8.1	5.9	14.8	15.7
46	15.7	10.8	24.1	26.5	11.8	5.1	4.5	8.3	6.6	15.9	17.1
48	17.1	11.2	25.5	28.3	13.3	5.4	4.9	8.4	7.4	17.1	18.7
50	18.6	11.7	27.1	30.3	15.0	5.8	5.2	8.6	8.3	18.5	20.4
52	20.6	12.2	29.0	32.7	17.1	6.3	5.6	8.8	9.5	20.2	22.4
54	23.0	12.7	31.4	35.7	19.7	6.7	6.0	9.0	10.9	22.4	24.6
56	26.0	13.3	34.3	39.4	22.9	7.3	6.5	9.3	12.7	25.1	27.2
58	30.2	14.0	38.2	44.2	27.3	7.9	7.0	9.5	15.1	28.7	30.2
60	36.2	14.8	43.7	51.0	33.5	8.5	7.6	9.8	18.6	33.9	33.9
62	45.8	15.8	52.4	61.6	43.5	9.3	8.3	10.2	24.1	42.2	38.7
64	65.1	17.1	69.2	82.2	63.3	10.3	9.2	10.6	35.1	58.6	45.3
66	145.6	19.3	137.6	164.8	144.5	11.9	10.6	11.3	80.2	126.3	57.3

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

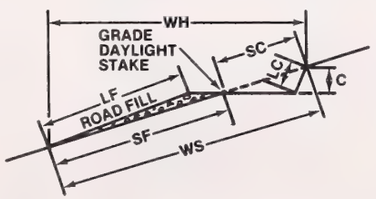
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 12 FEET

CUT SLOPE = .75 TO 1

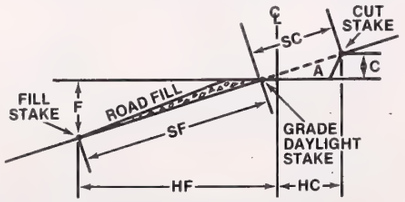
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.7	6.9	13.5	13.6	1.2	.9	.7	6.5	.7	7.0	2.2
12	6.9	7.1	13.9	14.0	1.5	1.1	.8	6.6	.8	7.2	2.7
14	7.1	7.3	14.2	14.4	1.8	1.3	1.0	6.8	1.0	7.5	3.2
16	7.4	7.4	14.6	14.8	2.1	1.5	1.2	6.9	1.2	7.7	3.8
18	7.7	7.6	15.0	15.3	2.4	1.7	1.4	7.0	1.4	8.0	4.4
20	8.0	7.8	15.5	15.8	2.8	1.9	1.5	7.2	1.6	8.3	5.0
22	8.3	8.1	16.0	16.4	3.2	2.2	1.7	7.3	1.8	8.7	5.7
24	8.7	8.3	16.5	16.9	3.6	2.4	1.9	7.5	2.0	9.0	6.4
26	9.0	8.5	17.0	17.6	4.1	2.7	2.2	7.6	2.3	9.4	7.2
28	9.5	8.8	17.6	18.3	4.6	3.0	2.4	7.8	2.6	9.8	8.0
30	10.0	9.1	18.3	19.1	5.2	3.3	2.6	8.0	2.9	10.3	8.8
32	10.5	9.4	18.9	19.9	5.8	3.6	2.9	8.1	3.2	10.8	9.8
34	11.1	9.7	19.7	20.8	6.4	3.9	3.1	8.4	3.6	11.3	10.8
36	11.7	10.1	20.5	21.8	7.2	4.3	3.4	8.6	4.0	12.0	11.8
38	12.4	10.5	21.4	22.9	8.0	4.6	3.7	8.8	4.4	12.6	13.0
40	13.3	10.9	22.4	24.2	8.9	5.1	4.0	9.0	4.9	13.4	14.3
42	14.2	11.3	23.5	25.5	9.9	5.5	4.4	9.3	5.5	14.3	15.7
44	15.3	11.8	24.8	27.1	11.1	5.9	4.8	9.6	6.2	15.2	17.2
46	16.5	12.3	26.2	28.9	12.5	6.4	5.2	9.9	6.9	16.4	18.9
48	18.0	12.9	27.9	30.9	14.0	7.0	5.6	10.2	7.8	17.7	20.8
50	19.8	13.6	29.8	33.3	15.9	7.6	6.1	10.5	8.8	19.3	23.0
52	21.9	14.3	32.1	36.2	18.2	8.2	6.6	10.9	10.1	21.2	25.4
54	24.6	15.1	34.9	39.7	21.1	9.0	7.2	11.4	11.7	23.5	28.2
56	28.0	16.0	38.4	44.0	24.7	9.8	7.8	11.9	13.7	26.6	31.6
58	32.7	17.0	43.0	49.7	29.6	10.7	8.5	12.4	16.4	30.6	35.5
60	39.5	18.3	49.5	57.8	36.6	11.7	9.4	13.0	20.3	36.5	40.5
62	50.4	19.8	59.7	70.2	47.9	13.0	10.4	13.8	26.6	45.9	46.9
64	72.5	21.8	79.5	94.3	70.5	14.7	11.8	14.8	39.1	64.6	56.2
66	165.1	25.2	158.8	190.3	164.0	17.4	13.9	16.4	91.0	142.4	73.7

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

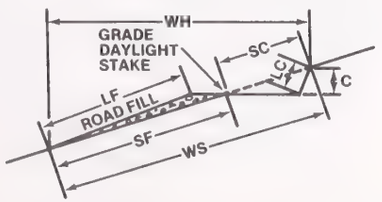
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 12 FEET

CUT SLOPE = 1.0 TO 1

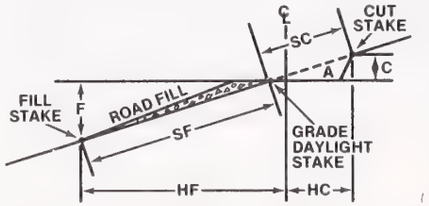
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.7	7.1	13.7	13.8	1.2	1.0	.7	6.7	.7	7.0	2.2
12	6.9	7.3	14.1	14.2	1.5	1.2	.9	6.9	.8	7.2	2.7
14	7.2	7.5	14.5	14.7	1.8	1.5	1.0	7.0	1.0	7.5	3.3
16	7.5	7.7	15.0	15.2	2.1	1.7	1.2	7.2	1.2	7.8	3.9
18	7.8	8.0	15.5	15.7	2.5	2.0	1.4	7.4	1.4	8.1	4.5
20	8.1	8.2	16.0	16.3	2.9	2.3	1.6	7.6	1.6	8.4	5.2
22	8.4	8.5	16.5	16.9	3.3	2.6	1.8	7.8	1.8	8.7	5.9
24	8.8	8.8	17.1	17.6	3.7	2.9	2.1	8.1	2.1	9.1	6.7
26	9.3	9.1	17.8	18.4	4.2	3.2	2.3	8.3	2.3	9.5	7.5
28	9.7	9.5	18.5	19.2	4.7	3.6	2.6	8.6	2.6	9.9	8.4
30	10.2	9.8	19.2	20.1	5.3	4.0	2.8	8.8	2.9	10.4	9.3
32	10.8	10.3	20.1	21.1	5.9	4.4	3.1	9.1	3.3	10.9	10.4
34	11.5	10.7	21.0	22.2	6.6	4.9	3.4	9.4	3.7	11.5	11.5
36	12.2	11.2	22.0	23.3	7.4	5.4	3.8	9.8	4.1	12.2	12.8
38	13.0	11.7	23.1	24.7	8.3	5.9	4.2	10.2	4.6	12.9	14.1
40	13.9	12.3	24.3	26.2	9.3	6.5	4.6	10.6	5.2	13.7	15.6
42	14.9	12.9	25.7	27.8	10.4	7.1	5.0	11.0	5.8	14.7	17.3
44	16.1	13.6	27.2	29.7	11.7	7.8	5.5	11.5	6.5	15.7	19.2
46	17.5	14.4	29.0	31.9	13.2	8.5	6.0	12.0	7.3	17.0	21.3
48	19.2	15.3	31.1	34.5	15.0	9.3	6.6	12.6	8.3	18.5	23.6
50	21.2	16.2	33.5	37.4	17.1	10.3	7.3	13.3	9.5	20.2	26.4
52	23.6	17.3	36.4	41.0	19.7	11.3	8.0	14.0	10.9	22.4	29.6
54	26.7	18.6	39.9	45.3	22.9	12.5	8.8	14.8	12.7	25.0	33.3
56	30.7	20.1	44.3	50.8	27.1	13.9	9.8	15.8	15.0	28.5	37.9
58	36.2	21.8	50.2	58.0	32.7	15.5	11.0	17.0	18.2	33.2	43.4
60	44.2	23.9	58.4	68.1	41.0	17.4	12.3	18.3	22.7	40.1	50.6
62	57.2	26.6	71.2	83.8	54.3	19.8	14.0	20.0	30.1	51.2	60.3
64	83.7	30.3	96.0	114.0	81.4	23.1	16.3	22.3	45.1	73.7	74.9
66	196.3	36.5	194.3	232.8	194.9	28.4	20.1	26.1	108.1	168.2	104.2

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

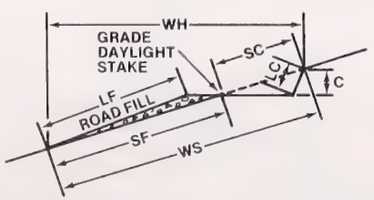
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 12 FEET

CUT SLOPE = 1.5 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	6.8	7.4	14.1	14.2	1.2	1.3	.7	7.1	.7	7.0	2.3
12	7.1	7.7	14.6	14.7	1.5	1.6	.9	7.4	.8	7.3	2.9
14	7.4	8.0	15.2	15.3	1.8	2.0	1.1	7.7	1.0	7.5	3.5
16	7.7	8.3	15.8	16.0	2.2	2.4	1.3	8.0	1.2	7.8	4.1
18	8.0	8.7	16.4	16.7	2.6	2.8	1.5	8.3	1.4	8.1	4.8
20	8.4	9.1	17.1	17.5	3.0	3.2	1.8	8.7	1.6	8.5	5.6
22	8.8	9.5	17.9	18.3	3.4	3.7	2.1	9.1	1.9	8.8	6.4
24	9.2	10.0	18.8	19.3	3.9	4.2	2.3	9.5	2.2	9.2	7.3
26	9.8	10.6	19.7	20.3	4.4	4.8	2.7	10.0	2.5	9.7	8.3
28	10.3	11.2	20.7	21.5	5.0	5.4	3.0	10.5	2.8	10.2	9.4
30	10.9	11.9	21.8	22.8	5.7	6.1	3.4	11.1	3.1	10.7	10.6
32	11.6	12.6	23.1	24.2	6.4	6.9	3.8	11.8	3.5	11.3	12.0
34	12.4	13.5	24.5	25.9	7.2	7.8	4.3	12.5	4.0	12.0	13.5
36	13.3	14.4	26.1	27.7	8.1	8.8	4.9	13.3	4.5	12.8	15.3
38	14.3	15.5	27.9	29.9	9.2	9.9	5.5	14.3	5.1	13.6	17.2
40	15.5	16.8	30.0	32.3	10.4	11.3	6.2	15.4	5.8	14.6	19.5
42	16.9	18.3	32.4	35.2	11.8	12.8	7.1	16.6	6.5	15.8	22.1
44	18.5	20.1	35.3	38.6	13.4	14.6	8.1	18.1	7.4	17.2	25.2
46	20.4	22.2	38.7	42.6	15.4	16.7	9.3	19.9	8.5	18.8	28.9
48	22.8	24.7	42.9	47.5	17.8	19.3	10.7	22.1	9.9	20.8	33.4
50	25.7	27.9	48.0	53.7	20.8	22.5	12.5	24.7	11.5	23.3	39.0
52	29.5	32.0	54.5	61.5	24.5	26.6	14.8	28.1	13.6	26.4	46.1
54	34.4	37.3	63.2	71.8	29.5	32.0	17.7	32.6	16.4	30.5	55.4
56	41.2	44.7	75.0	86.0	36.3	39.4	21.9	38.8	20.1	36.2	68.2
58	51.2	55.5	92.3	106.7	46.3	50.2	27.9	47.8	25.7	44.5	87.0
60	67.1	72.8	120.0	139.9	62.3	67.5	37.5	62.2	34.5	57.8	116.9
62	96.8	104.9	171.4	201.7	91.9	99.7	55.3	89.0	51.0	82.5	172.6
64	170.9	185.3	300.0	356.2	166.0	180.1	99.9	155.8	92.1	144.2	311.9
66	689.7	748.1	1200.0	1437.8	684.9	742.9	412.1	624.1	379.9	575.9	1286.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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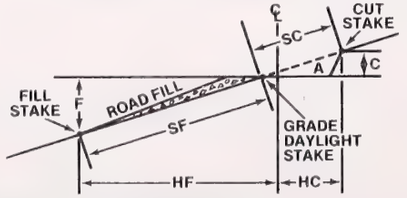
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

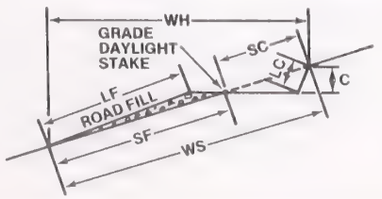
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 13 FEET

CUT SLOPE = VERTICAL

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.1	7.1	14.1	14.1	1.3	.7	.7	6.5	.7	7.6	2.5
12	7.3	7.1	14.3	14.4	1.6	.9	.9	6.5	.9	7.8	3.0
14	7.5	7.2	14.6	14.7	1.9	1.0	1.0	6.5	1.0	8.1	3.6
16	7.7	7.3	14.8	15.0	2.2	1.2	1.2	6.5	1.2	8.3	4.2
18	8.0	7.4	15.1	15.4	2.5	1.3	1.3	6.5	1.4	8.6	4.8
20	8.2	7.5	15.4	15.7	2.9	1.5	1.5	6.5	1.6	8.9	5.4
22	8.5	7.6	15.8	16.1	3.3	1.6	1.6	6.5	1.8	9.3	6.0
24	8.9	7.7	16.1	16.6	3.7	1.8	1.8	6.5	2.1	9.6	6.7
26	9.2	7.8	16.5	17.0	4.2	2.0	2.0	6.5	2.3	10.0	7.4
28	9.6	7.9	16.9	17.5	4.7	2.1	2.1	6.5	2.6	10.4	8.2
30	10.0	8.1	17.3	18.1	5.2	2.3	2.3	6.5	2.9	10.8	8.9
32	10.5	8.2	17.8	18.7	5.8	2.5	2.5	6.5	3.2	11.3	9.8
34	11.0	8.3	18.3	19.3	6.4	2.7	2.7	6.5	3.5	11.8	10.6
36	11.6	8.5	18.9	20.1	7.1	2.9	2.9	6.5	3.9	12.4	11.5
38	12.2	8.7	19.5	20.9	7.8	3.1	3.1	6.5	4.3	13.0	12.5
40	12.9	8.8	20.2	21.7	8.6	3.3	3.3	6.5	4.8	13.7	13.5
42	13.7	9.0	21.0	22.7	9.6	3.5	3.5	6.5	5.3	14.5	14.6
44	14.6	9.2	21.8	23.8	10.6	3.7	3.7	6.5	5.9	15.3	15.7
46	15.7	9.5	22.8	25.1	11.8	4.0	4.0	6.5	6.5	16.3	17.0
48	16.9	9.7	24.0	26.6	13.2	4.2	4.2	6.5	7.3	17.5	18.3
50	18.3	9.9	25.3	28.3	14.8	4.4	4.4	6.5	8.2	18.8	19.8
52	20.1	10.2	26.9	30.3	16.7	4.7	4.7	6.5	9.3	20.4	21.4
54	22.3	10.5	28.9	32.8	19.1	5.0	5.0	6.5	10.6	22.4	23.2
56	25.1	10.9	31.4	36.0	22.1	5.3	5.3	6.5	12.3	24.9	25.3
58	28.8	11.3	34.7	40.1	26.1	5.7	5.7	6.5	14.5	28.2	27.6
60	34.2	11.7	39.4	46.0	31.7	6.0	6.0	6.5	17.6	32.9	30.4
62	42.8	12.3	46.9	55.1	40.7	6.5	6.5	6.5	22.6	40.4	33.9
64	60.1	13.0	61.6	73.1	58.4	7.0	7.0	6.5	32.4	55.1	38.6
66	131.5	14.3	121.6	145.7	130.6	7.9	7.9	6.5	72.4	115.1	46.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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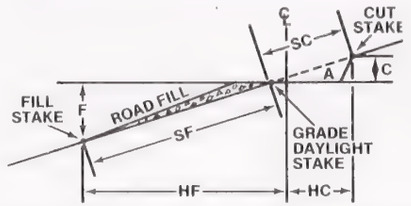
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

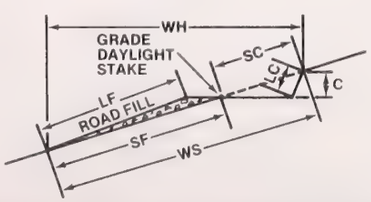
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 13 FEET

CUT SLOPE = .10 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.1	7.1	14.1	14.2	1.3	.7	.7	6.6	.7	7.6	2.5
12	7.3	7.2	14.4	14.5	1.6	.9	.9	6.6	.9	7.8	3.0
14	7.5	7.3	14.7	14.8	1.9	1.0	1.0	6.6	1.0	8.1	3.6
16	7.8	7.4	15.0	15.1	2.2	1.2	1.2	6.6	1.2	8.3	4.2
18	8.0	7.5	15.3	15.5	2.6	1.3	1.3	6.6	1.4	8.6	4.8
20	8.3	7.6	15.6	15.9	2.9	1.5	1.5	6.6	1.6	8.9	5.4
22	8.6	7.7	15.9	16.3	3.3	1.7	1.7	6.7	1.8	9.3	6.1
24	8.9	7.8	16.3	16.8	3.8	1.8	1.8	6.7	2.1	9.6	6.8
26	9.3	8.0	16.7	17.3	4.2	2.0	2.0	6.7	2.3	10.0	7.5
28	9.7	8.1	17.1	17.8	4.7	2.2	2.2	6.7	2.6	10.4	8.3
30	10.1	8.3	17.6	18.4	5.2	2.4	2.4	6.7	2.9	10.9	9.1
32	10.6	8.4	18.1	19.0	5.8	2.6	2.6	6.8	3.2	11.3	9.9
34	11.1	8.6	18.6	19.7	6.4	2.8	2.8	6.8	3.6	11.9	10.8
36	11.7	8.8	19.2	20.4	7.1	3.0	3.0	6.8	4.0	12.4	11.8
38	12.3	8.9	19.9	21.3	7.9	3.2	3.2	6.8	4.4	13.1	12.8
40	13.1	9.1	20.6	22.2	8.7	3.4	3.4	6.8	4.9	13.8	13.8
42	13.9	9.4	21.4	23.2	9.7	3.6	3.6	6.9	5.4	14.6	15.0
44	14.8	9.6	22.3	24.4	10.8	3.9	3.9	6.9	6.0	15.5	16.2
46	15.9	9.8	23.4	25.7	12.0	4.1	4.1	6.9	6.6	16.5	17.5
48	17.2	10.1	24.6	27.3	13.4	4.4	4.4	6.9	7.4	17.6	18.9
50	18.7	10.4	26.0	29.1	15.1	4.7	4.6	7.0	8.3	19.0	20.5
52	20.5	10.7	27.7	31.2	17.0	5.0	4.9	7.0	9.5	20.7	22.2
54	22.7	11.1	29.7	33.8	19.5	5.3	5.3	7.0	10.8	22.7	24.2
56	25.6	11.4	32.3	37.1	22.6	5.6	5.6	7.1	12.5	25.3	26.3
58	29.5	11.9	35.8	41.4	26.7	6.0	6.0	7.1	14.8	28.7	28.9
60	35.0	12.4	40.7	47.4	32.5	6.4	6.4	7.1	18.0	33.5	31.9
62	44.0	13.0	48.4	57.0	41.8	6.9	6.9	7.2	23.2	41.2	35.6
64	61.8	13.9	63.7	75.6	60.0	7.5	7.5	7.2	33.3	56.4	40.8
66	135.7	15.2	125.9	150.9	134.7	8.4	8.4	7.3	74.7	118.6	49.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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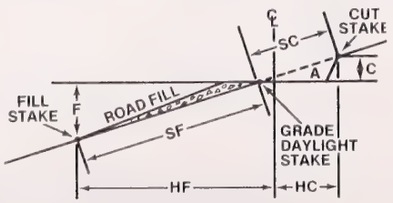
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

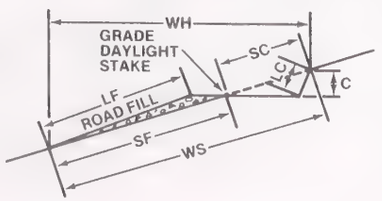
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 13 FEET

CUT SLOPE = .25 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.1	7.2	14.2	14.3	1.3	.7	.7	6.7	.7	7.6	2.5
12	7.3	7.3	14.5	14.6	1.6	.9	.9	6.7	.9	7.8	3.1
14	7.6	7.4	14.8	15.0	1.9	1.1	1.0	6.8	1.0	8.1	3.6
16	7.8	7.5	15.1	15.3	2.2	1.2	1.2	6.8	1.2	8.4	4.3
18	8.1	7.7	15.5	15.7	2.6	1.4	1.4	6.8	1.4	8.6	4.9
20	8.4	7.8	15.8	16.2	3.0	1.6	1.5	6.9	1.6	9.0	5.5
22	8.7	7.9	16.2	16.6	3.4	1.8	1.7	6.9	1.9	9.3	6.2
24	9.0	8.1	16.6	17.1	3.8	1.9	1.9	7.0	2.1	9.7	7.0
26	9.4	8.2	17.1	17.6	4.3	2.1	2.1	7.0	2.4	10.0	7.7
28	9.8	8.4	17.5	18.2	4.8	2.3	2.3	7.1	2.6	10.5	8.5
30	10.3	8.6	18.0	18.8	5.3	2.5	2.5	7.1	2.9	10.9	9.4
32	10.7	8.8	18.6	19.5	5.9	2.8	2.7	7.2	3.3	11.4	10.3
34	11.3	9.0	19.2	20.3	6.6	3.0	2.9	7.2	3.6	12.0	11.2
36	11.9	9.2	19.8	21.1	7.3	3.2	3.1	7.3	4.0	12.5	12.2
38	12.6	9.4	20.5	22.0	8.0	3.4	3.3	7.3	4.5	13.2	13.3
40	13.3	9.6	21.3	23.0	8.9	3.7	3.6	7.4	4.9	13.9	14.4
42	14.2	9.9	22.2	24.1	9.9	3.9	3.8	7.5	5.5	14.7	15.6
44	15.2	10.2	23.2	25.3	11.0	4.2	4.1	7.5	6.1	15.7	17.0
46	16.3	10.5	24.3	26.8	12.3	4.5	4.4	7.6	6.8	16.7	18.4
48	17.6	10.8	25.6	28.4	13.7	4.8	4.7	7.7	7.6	17.9	19.9
50	19.2	11.1	27.1	30.3	15.5	5.1	5.0	7.7	8.6	19.4	21.7
52	21.1	11.5	28.9	32.6	17.5	5.5	5.3	7.8	9.7	21.1	23.6
54	23.5	11.9	31.1	35.4	20.1	5.8	5.7	7.9	11.1	23.2	25.7
56	26.5	12.4	33.9	38.9	23.3	6.2	6.1	8.0	12.9	25.9	28.2
58	30.6	12.9	37.6	43.5	27.6	6.7	6.5	8.1	15.3	29.5	31.0
60	36.4	13.6	42.9	50.0	33.8	7.2	7.0	8.2	18.7	34.6	34.4
62	45.8	14.3	51.1	60.1	43.5	7.8	7.5	8.4	24.1	42.7	38.7
64	64.6	15.3	67.3	79.9	62.8	8.5	8.2	8.6	34.8	58.8	44.6
66	142.8	16.9	133.3	159.7	141.8	9.6	9.3	8.8	78.6	124.5	55.1

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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LF = LENGTH OF FILL SLOPE
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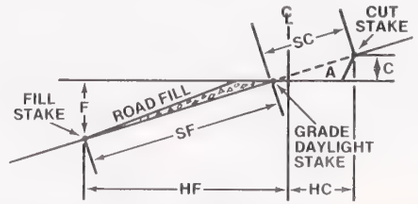
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

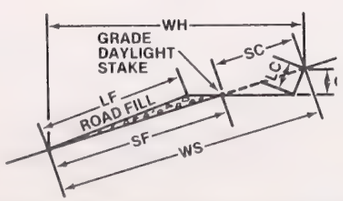
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 13 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.2	7.3	14.4	14.5	1.3	.8	.7	6.9	.7	7.6	2.5
12	7.4	7.5	14.8	14.9	1.6	1.0	.9	6.9	.9	7.8	3.1
14	7.6	7.6	15.1	15.3	1.9	1.2	1.1	7.0	1.1	8.1	3.7
16	7.9	7.8	15.5	15.7	2.2	1.4	1.2	7.1	1.2	8.4	4.4
18	8.2	8.0	15.9	16.1	2.6	1.6	1.4	7.2	1.4	8.7	5.0
20	8.5	8.1	16.3	16.6	3.0	1.8	1.6	7.3	1.7	9.0	5.7
22	8.8	8.3	16.7	17.1	3.4	2.0	1.8	7.4	1.9	9.3	6.4
24	9.2	8.5	17.2	17.7	3.9	2.2	2.0	7.5	2.1	9.7	7.2
26	9.6	8.7	17.7	18.3	4.4	2.5	2.2	7.6	2.4	10.1	8.0
28	10.0	8.9	18.3	19.0	4.9	2.7	2.4	7.7	2.7	10.6	8.9
30	10.5	9.2	18.8	19.7	5.4	2.9	2.6	7.8	3.0	11.0	9.8
32	11.0	9.4	19.5	20.5	6.1	3.2	2.9	7.9	3.4	11.5	10.8
34	11.6	9.7	20.2	21.3	6.7	3.5	3.1	8.1	3.7	12.1	11.9
36	12.3	10.0	20.9	22.2	7.5	3.8	3.4	8.2	4.2	12.7	13.0
38	13.0	10.3	21.7	23.3	8.3	4.1	3.6	8.3	4.6	13.4	14.2
40	13.8	10.6	22.7	24.4	9.2	4.4	3.9	8.5	5.1	14.2	15.5
42	14.7	10.9	23.7	25.7	10.3	4.7	4.2	8.6	5.7	15.1	16.9
44	15.8	11.3	24.8	27.1	11.5	5.1	4.6	8.8	6.4	16.0	18.4
46	17.0	11.7	26.1	28.8	12.8	5.5	4.9	8.9	7.1	17.2	20.1
48	18.5	12.2	27.6	30.6	14.4	5.9	5.3	9.1	8.0	18.5	21.9
50	20.2	12.6	29.4	32.8	16.3	6.3	5.7	9.3	9.0	20.0	24.0
52	22.3	13.2	31.5	35.5	18.5	6.8	6.1	9.5	10.3	21.9	26.3
54	24.9	13.8	34.0	38.6	21.3	7.3	6.5	9.8	11.8	24.2	28.9
56	28.2	14.4	37.2	42.6	24.8	7.9	7.0	10.0	13.8	27.2	31.9
58	32.7	15.2	41.4	47.9	29.6	8.5	7.6	10.3	16.4	31.1	35.5
60	39.2	16.1	47.4	55.2	36.3	9.2	8.3	10.6	20.2	36.7	39.8
62	49.6	17.1	56.7	66.7	47.1	10.1	9.0	11.0	26.1	45.7	45.4
64	70.5	18.5	75.0	89.1	68.5	11.2	10.0	11.5	38.0	63.5	53.1
66	157.7	20.9	149.0	178.6	156.6	12.9	11.5	12.3	86.9	136.8	67.2

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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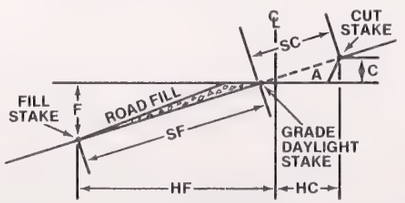
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

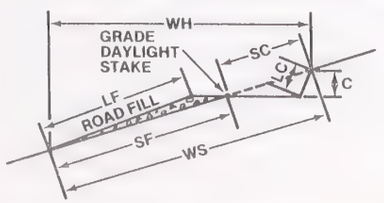
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 13 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.2	7.5	14.6	14.7	1.3	.9	.7	7.1	.7	7.6	2.6
12	7.5	7.7	15.0	15.1	1.6	1.1	.9	7.2	.9	7.8	3.2
14	7.7	7.9	15.4	15.6	1.9	1.4	1.1	7.3	1.1	8.1	3.8
16	8.0	8.1	15.8	16.1	2.3	1.6	1.3	7.5	1.3	8.4	4.5
18	8.3	8.3	16.3	16.6	2.6	1.8	1.5	7.6	1.5	8.7	5.2
20	8.6	8.5	16.8	17.1	3.1	2.1	1.7	7.7	1.7	9.0	5.9
22	9.0	8.7	17.3	17.7	3.5	2.3	1.9	7.9	1.9	9.4	6.7
24	9.4	9.0	17.9	18.4	3.9	2.6	2.1	8.1	2.2	9.8	7.5
26	9.8	9.3	18.4	19.1	4.4	2.9	2.3	8.2	2.5	10.2	8.4
28	10.3	9.5	19.1	19.8	5.0	3.2	2.6	8.4	2.8	10.7	9.3
30	10.8	9.9	19.8	20.6	5.6	3.5	2.8	8.6	3.1	11.1	10.4
32	11.4	10.2	20.5	21.5	6.2	3.9	3.1	8.8	3.5	11.7	11.5
34	12.0	10.5	21.3	22.5	7.0	4.2	3.4	9.0	3.9	12.3	12.6
36	12.7	10.9	22.2	23.6	7.8	4.6	3.7	9.3	4.3	12.9	13.9
38	13.5	11.3	23.2	24.8	8.6	5.0	4.0	9.5	4.8	13.7	15.3
40	14.4	11.8	24.3	26.2	9.6	5.5	4.4	9.8	5.3	14.5	16.8
42	15.4	12.3	25.5	27.7	10.7	5.9	4.8	10.1	6.0	15.4	19.4
44	16.6	12.8	26.9	29.4	12.0	6.4	5.2	10.4	6.7	16.5	20.2
46	17.9	13.4	28.4	31.3	13.5	7.0	5.6	10.7	7.5	17.7	22.2
48	19.5	14.0	30.2	33.5	15.2	7.6	6.1	11.0	8.4	19.2	24.5
50	21.4	14.7	32.3	36.1	17.3	8.2	6.6	11.4	9.6	20.9	27.0
52	23.7	15.5	34.8	39.2	19.7	8.9	7.1	11.8	11.0	22.9	29.8
54	26.6	16.3	37.8	43.0	22.8	9.7	7.8	12.3	12.7	25.5	33.1
56	30.4	17.3	41.6	47.7	26.8	10.6	8.5	12.8	14.8	28.8	37.0
58	35.4	18.4	46.6	53.9	32.1	11.6	9.3	13.4	17.8	33.2	41.7
60	42.8	19.8	53.7	62.6	39.7	12.7	10.2	14.1	22.0	39.5	47.5
62	54.6	21.4	64.7	76.1	51.9	14.1	11.3	15.0	28.8	49.7	55.1
64	78.6	23.6	86.1	102.2	76.4	15.9	12.7	16.1	42.4	70.0	66.0
66	178.9	27.3	172.1	206.2	177.6	18.8	15.0	17.8	98.5	154.3	86.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
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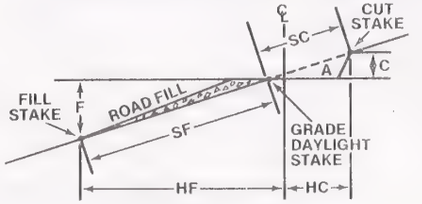
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

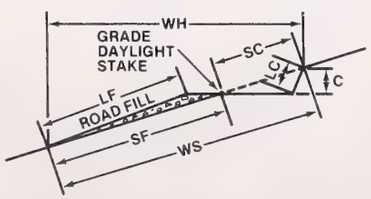
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 13 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.3	7.7	14.8	14.9	1.3	1.1	.8	7.3	.7	7.6	2.6
12	7.5	7.9	15.3	15.4	1.6	1.3	.9	7.4	.9	7.8	3.2
14	7.8	8.1	15.7	15.9	1.9	1.6	1.1	7.6	1.1	8.1	3.9
16	8.1	8.4	16.2	16.4	2.3	1.9	1.3	7.8	1.3	8.4	4.6
18	8.4	8.6	16.8	17.0	2.7	2.2	1.5	8.0	1.5	8.7	5.3
20	8.8	8.9	17.3	17.7	3.1	2.5	1.7	8.2	1.7	9.1	6.1
22	9.2	9.2	17.9	18.4	3.5	2.8	2.0	8.5	2.0	9.5	6.9
24	9.6	9.5	18.6	19.1	4.0	3.1	2.2	8.7	2.2	9.9	7.8
26	10.0	9.9	19.3	19.9	4.6	3.5	2.5	9.0	2.5	10.3	8.8
28	10.5	10.3	20.0	20.8	5.1	3.9	2.8	9.3	2.8	10.8	9.8
30	11.1	10.7	20.8	21.8	5.7	4.3	3.1	9.6	3.2	11.3	11.0
32	11.7	11.1	21.7	22.8	6.4	4.8	3.4	9.9	3.6	11.9	12.2
34	12.4	11.6	22.7	24.0	7.2	5.3	3.7	10.2	4.0	12.5	13.5
36	13.2	12.1	23.8	25.3	8.0	5.8	4.1	10.6	4.5	13.2	15.0
38	14.0	12.7	25.0	26.7	9.0	6.4	4.5	11.0	5.0	14.0	16.6
40	15.0	13.3	26.3	28.3	10.1	7.0	4.9	11.4	5.6	14.9	18.3
42	16.2	14.0	27.8	30.2	11.3	7.7	5.4	11.9	6.3	15.9	20.3
44	17.5	14.8	29.5	32.2	12.7	8.4	5.9	12.4	7.0	17.0	22.5
46	19.0	15.6	31.4	34.6	14.3	9.2	6.5	13.0	7.9	18.4	24.9
48	20.8	16.5	33.6	37.3	16.2	10.1	7.2	13.7	9.0	20.0	27.8
50	22.9	17.6	36.3	40.5	18.5	11.1	7.9	14.4	10.3	21.9	31.0
52	25.6	18.8	39.4	44.4	21.3	12.3	8.7	15.2	11.8	24.2	34.7
54	28.9	20.2	43.2	49.1	24.8	13.6	9.6	16.1	13.7	27.1	39.1
56	33.3	21.8	48.0	55.0	29.3	15.0	10.6	17.1	16.3	30.9	44.4
58	39.2	23.7	54.4	62.8	35.4	16.8	11.9	18.4	19.7	36.0	51.0
60	47.8	25.9	63.3	73.8	44.4	18.9	13.3	19.8	24.6	43.4	59.4
62	62.0	28.8	77.2	90.8	58.9	21.5	15.2	21.7	32.6	55.5	70.8
64	90.7	32.8	104.0	123.5	88.1	25.0	17.7	24.2	48.9	79.8	87.9
66	212.7	39.6	210.5	252.2	211.2	30.8	21.8	28.3	117.1	182.2	122.3

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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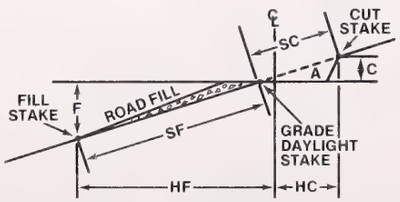
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

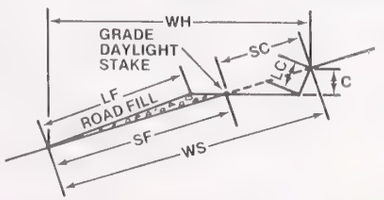
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 13 FEET

CUT SLOPE = 1.5 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.4	8.0	15.3	15.4	1.3	1.4	.8	7.7	.7	7.6	2.7
12	7.7	8.3	15.9	16.0	1.6	1.8	1.0	8.0	.9	7.9	3.3
14	8.0	8.6	16.5	16.6	2.0	2.2	1.2	8.3	1.1	8.2	4.1
16	8.3	9.0	17.1	17.3	2.4	2.6	1.4	8.6	1.3	8.5	4.8
18	8.7	9.4	17.8	18.1	2.8	3.0	1.7	9.0	1.5	8.8	5.6
20	9.1	9.9	18.6	18.9	3.2	3.5	1.9	9.4	1.8	9.2	6.5
22	9.5	10.3	19.4	19.9	3.7	4.0	2.2	9.8	2.0	9.6	7.5
24	10.0	10.9	20.3	20.9	4.2	4.6	2.5	10.3	2.3	10.0	8.6
26	10.6	11.5	21.3	22.0	4.8	5.2	2.9	10.8	2.7	10.5	9.8
28	11.2	12.1	22.4	23.3	5.4	5.9	3.3	11.4	3.0	11.0	11.0
30	11.8	12.8	23.6	24.7	6.1	6.7	3.7	12.0	3.4	11.6	12.5
32	12.6	13.7	25.0	26.2	6.9	7.5	4.2	12.7	3.8	12.3	14.1
34	13.4	14.6	26.5	28.0	7.8	8.5	4.7	13.5	4.3	13.0	15.9
36	14.4	15.6	28.3	30.0	8.8	9.5	5.3	14.4	4.9	13.8	17.9
38	15.5	16.8	30.2	32.3	9.9	10.8	6.0	15.5	5.5	14.8	20.2
40	16.8	18.2	32.5	35.0	11.2	12.2	6.8	16.6	6.2	15.9	22.9
42	18.3	19.8	35.1	38.1	12.8	13.8	7.7	18.0	7.1	17.1	26.0
44	20.0	21.7	38.2	41.8	14.5	15.8	8.8	19.6	8.1	18.6	29.6
46	22.1	24.0	41.9	46.2	16.7	18.1	10.0	21.6	9.3	20.4	33.9
48	24.7	26.8	46.4	51.5	19.3	20.9	11.6	23.9	10.7	22.5	39.2
50	27.9	30.2	52.0	58.1	22.5	24.4	13.5	26.8	12.5	25.2	45.8
52	31.9	34.7	59.1	66.6	26.6	28.8	16.0	30.5	14.7	28.6	54.1
54	37.3	40.5	68.4	77.8	32.0	34.7	19.2	35.3	17.7	33.1	65.0
56	44.7	48.5	81.2	93.1	39.3	42.7	23.7	42.0	21.8	39.2	80.1
58	55.5	60.1	100.0	115.6	50.2	54.4	30.2	51.8	27.8	48.2	102.1
60	72.7	78.9	130.0	151.6	67.5	73.2	40.6	67.4	37.4	62.6	137.3
62	104.8	113.7	185.7	218.5	99.6	108.0	59.9	96.4	55.2	89.4	202.6
64	185.1	200.8	325.0	385.9	179.9	195.1	108.2	168.8	99.8	156.2	366.0
66	747.2	810.4	1300.0	1557.6	742.0	804.8	446.4	676.1	411.6	623.9	1509.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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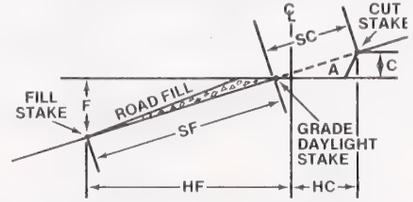
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

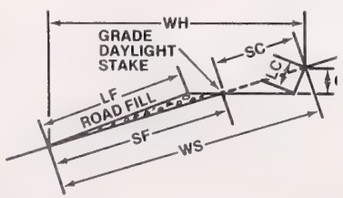
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 14 FEET

CUT SLOPE = VERTICAL

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.6	7.6	15.1	15.2	1.4	.8	.8	7.0	.8	8.1	2.9
12	7.8	7.7	15.4	15.5	1.7	.9	.9	7.0	.9	8.4	3.5
14	8.1	7.8	15.7	15.8	2.0	1.1	1.1	7.0	1.1	8.7	4.1
16	8.3	7.9	16.0	16.2	2.4	1.2	1.2	7.0	1.3	9.0	4.8
18	8.6	8.0	16.3	16.5	2.7	1.4	1.4	7.0	1.5	9.3	5.5
20	8.9	8.1	16.6	16.9	3.1	1.6	1.6	7.0	1.7	9.6	6.2
22	9.2	8.2	17.0	17.4	3.6	1.8	1.8	7.0	2.0	10.0	7.0
24	9.5	8.3	17.3	17.8	4.0	1.9	1.9	7.0	2.2	10.3	7.8
26	9.9	8.4	17.7	18.3	4.5	2.1	2.1	7.0	2.5	10.7	8.6
28	10.3	8.5	18.2	18.9	5.0	2.3	2.3	7.0	2.8	11.2	9.5
30	10.8	8.7	18.7	19.5	5.6	2.5	2.5	7.0	3.1	11.7	10.4
32	11.3	8.8	19.2	20.1	6.2	2.7	2.7	7.0	3.4	12.2	11.3
34	11.8	9.0	19.7	20.8	6.9	2.9	2.9	7.0	3.8	12.7	12.3
36	12.4	9.2	20.3	21.6	7.6	3.1	3.1	7.0	4.2	13.3	13.4
38	13.1	9.3	21.0	22.5	8.4	3.3	3.3	7.0	4.7	14.0	14.5
40	13.9	9.5	21.7	23.4	9.3	3.5	3.5	7.0	5.2	14.7	15.6
42	14.7	9.7	22.6	24.5	10.3	3.8	3.8	7.0	5.7	15.6	16.9
44	15.7	9.9	23.5	25.7	11.4	4.0	4.0	7.0	6.3	16.5	18.2
46	16.9	10.2	24.6	27.0	12.7	4.3	4.3	7.0	7.0	17.6	19.7
48	18.2	10.4	25.8	28.6	14.2	4.5	4.5	7.0	7.9	18.8	21.2
50	19.8	10.7	27.3	30.5	15.9	4.8	4.8	7.0	8.8	20.3	23.0
52	21.7	11.0	29.0	32.7	18.0	5.1	5.1	7.0	10.0	22.0	24.8
54	24.0	11.3	31.1	35.4	20.6	5.4	5.4	7.0	11.4	24.1	26.9
56	27.0	11.7	33.8	38.7	23.8	5.7	5.7	7.0	13.2	26.8	29.3
58	31.1	12.1	37.4	43.2	28.1	6.1	6.1	7.0	15.6	30.4	32.0
60	36.9	12.6	42.4	49.5	34.2	6.5	6.5	7.0	19.0	35.4	35.2
62	46.1	13.2	50.5	59.4	43.8	7.0	7.0	7.0	24.3	43.5	39.3
64	64.7	14.0	66.3	78.7	62.9	7.6	7.6	7.0	34.9	59.3	44.7
66	141.6	15.4	131.0	157.0	140.6	8.5	8.5	7.0	78.0	124.0	54.2

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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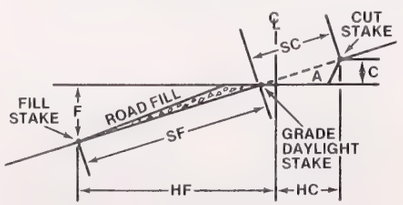
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

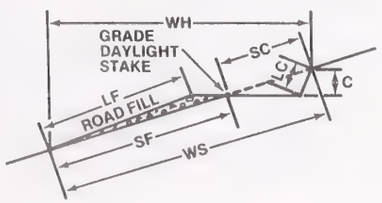
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 14 FEET

CUT SLOPE = .10 TO 1

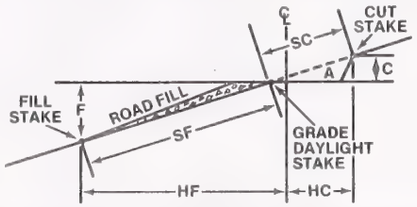
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.6	7.7	15.2	15.3	1.4	.8	.8	7.1	.8	8.1	2.9
12	7.8	7.8	15.5	15.6	1.7	.9	.9	7.1	.9	8.4	3.5
14	8.1	7.9	15.8	15.9	2.0	1.1	1.1	7.1	1.1	8.7	4.2
16	8.3	8.0	16.1	16.3	2.4	1.3	1.3	7.1	1.3	9.0	4.9
18	8.6	8.1	16.4	16.7	2.8	1.4	1.4	7.1	1.5	9.3	5.6
20	8.9	8.2	16.8	17.1	3.2	1.6	1.6	7.2	1.8	9.6	6.3
22	9.3	8.3	17.2	17.6	3.6	1.8	1.8	7.2	2.0	10.0	7.1
24	9.6	8.4	17.6	18.1	4.0	2.0	2.0	7.2	2.2	10.4	7.9
26	10.0	8.6	18.0	18.6	4.5	2.2	2.2	7.2	2.5	10.8	8.7
28	10.4	8.7	18.5	19.2	5.1	2.4	2.4	7.2	2.8	11.2	9.6
30	10.9	8.9	18.9	19.8	5.6	2.6	2.6	7.3	3.1	11.7	10.6
32	11.4	9.1	19.5	20.5	6.3	2.8	2.8	7.3	3.5	12.2	11.5
34	12.0	9.2	20.1	21.2	6.9	3.0	3.0	7.3	3.9	12.8	12.6
36	12.6	9.4	20.7	22.0	7.7	3.2	3.2	7.3	4.3	13.4	13.7
38	13.3	9.6	21.4	22.9	8.5	3.4	3.4	7.3	4.7	14.1	14.8
40	14.1	9.8	22.2	23.9	9.4	3.7	3.7	7.4	5.2	14.8	16.0
42	14.9	10.1	23.1	25.0	10.4	3.9	3.9	7.4	5.8	15.7	17.4
44	16.0	10.3	24.1	26.3	11.6	4.2	4.2	7.4	6.4	16.6	18.8
46	17.1	10.6	25.2	27.7	12.9	4.4	4.4	7.4	7.2	17.7	20.3
48	18.5	10.9	26.5	29.4	14.4	4.7	4.7	7.5	8.0	19.0	22.0
50	20.1	11.2	28.0	31.3	16.2	5.0	5.0	7.5	9.0	20.5	23.8
52	22.1	11.5	29.8	33.6	18.3	5.3	5.3	7.5	10.2	22.3	25.8
54	24.5	11.9	32.0	36.4	21.0	5.7	5.7	7.6	11.6	24.5	28.0
56	27.6	12.3	34.8	39.9	24.3	6.1	6.0	7.6	13.5	27.2	30.5
58	31.8	12.8	38.5	44.6	28.7	6.5	6.4	7.6	15.9	30.9	33.5
60	37.7	13.4	43.8	51.1	35.0	6.9	6.9	7.7	19.4	36.1	37.0
62	47.3	14.0	52.2	61.4	45.0	7.4	7.4	7.7	24.9	44.4	41.3
64	66.5	14.9	68.6	81.4	64.6	8.1	8.0	7.8	35.9	60.8	47.3
66	146.1	16.4	135.6	162.5	145.1	9.1	9.0	7.9	80.5	127.7	57.7

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

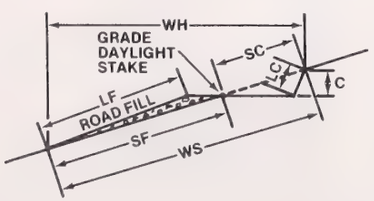
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 14 FEET

CUT SLOPE = .25 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.7	7.8	15.3	15.4	1.4	.8	.8	7.2	.8	8.1	2.9
12	7.9	7.9	15.6	15.8	1.7	1.0	.9	7.2	.9	8.4	3.6
14	8.1	8.0	16.0	16.1	2.0	1.1	1.1	7.3	1.1	8.7	4.2
16	8.4	8.1	16.3	16.5	2.4	1.3	1.3	7.3	1.3	9.0	4.9
18	8.7	8.2	16.7	16.9	2.8	1.5	1.5	7.4	1.5	9.3	5.7
20	9.0	8.4	17.1	17.4	3.2	1.7	1.6	7.4	1.8	9.7	6.4
22	9.4	8.5	17.5	17.9	3.6	1.9	1.8	7.5	2.0	10.0	7.2
24	9.7	8.7	17.9	18.4	4.1	2.1	2.0	7.5	2.3	10.4	8.1
26	10.1	8.9	18.4	19.0	4.6	2.3	2.2	7.6	2.5	10.8	9.0
28	10.6	9.0	18.9	19.6	5.1	2.5	2.4	7.6	2.8	11.3	9.9
30	11.0	9.2	19.4	20.3	5.7	2.7	2.7	7.7	3.2	11.8	10.9
32	11.6	9.4	20.0	21.0	6.4	3.0	2.9	7.7	3.5	12.3	11.9
34	12.2	9.7	20.6	21.8	7.1	3.2	3.1	7.8	3.9	12.9	13.0
36	12.8	9.9	21.3	22.7	7.8	3.4	3.3	7.8	4.3	13.5	14.1
38	13.5	10.1	22.1	23.7	8.7	3.7	3.6	7.9	4.8	14.2	15.4
40	14.3	10.4	23.0	24.7	9.6	4.0	3.9	8.0	5.3	15.0	16.7
42	15.3	10.7	23.9	25.9	10.7	4.3	4.1	8.0	5.9	15.9	18.1
44	16.3	10.9	25.0	27.3	11.9	4.5	4.4	8.1	6.6	16.9	19.7
46	17.5	11.3	26.2	28.8	13.2	4.9	4.7	8.2	7.3	18.0	21.3
48	19.0	11.6	27.6	30.6	14.8	5.2	5.0	8.3	8.2	19.3	23.1
50	20.7	12.0	29.2	32.7	16.7	5.5	5.4	8.3	9.2	20.9	25.1
52	22.7	12.4	31.2	35.1	18.9	5.9	5.7	8.4	10.5	22.7	27.3
54	25.3	12.8	33.5	38.1	21.6	6.3	6.1	8.5	12.0	25.0	29.8
56	28.5	13.3	36.5	41.9	25.1	6.7	6.5	8.6	13.9	27.9	32.7
58	32.9	13.9	40.5	46.8	29.8	7.2	7.0	8.7	16.5	31.8	36.0
60	39.2	14.6	46.1	53.8	36.4	7.7	7.5	8.9	20.2	37.3	39.9
62	49.3	15.4	55.0	64.8	46.9	8.4	8.1	9.0	26.0	46.0	44.9
64	69.6	16.5	72.5	86.1	67.6	9.2	8.9	9.2	37.5	63.3	51.7
66	153.7	18.2	143.5	172.0	152.7	10.4	10.1	9.5	84.7	134.0	63.9

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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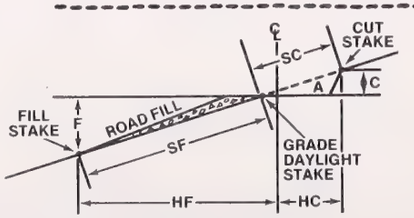
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

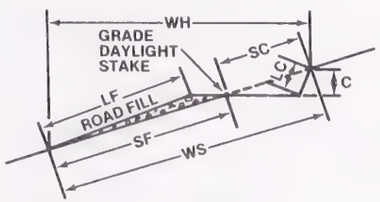
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 14 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.7	7.9	15.5	15.6	1.4	.9	.8	7.4	.8	8.2	2.9
12	8.0	8.1	15.9	16.0	1.7	1.1	1.0	7.5	.9	8.4	3.6
14	8.2	8.2	16.3	16.4	2.1	1.3	1.1	7.6	1.1	8.7	4.3
16	8.5	8.4	16.7	16.9	2.4	1.5	1.3	7.7	1.3	9.0	5.0
18	8.8	8.6	17.1	17.4	2.8	1.7	1.5	7.8	1.6	9.3	5.8
20	9.1	8.7	17.5	17.9	3.2	1.9	1.7	7.9	1.8	9.7	6.6
22	9.5	8.9	18.0	18.5	3.7	2.1	1.9	8.0	2.0	10.1	7.5
24	9.9	9.2	18.5	19.1	4.2	2.4	2.1	8.1	2.3	10.5	8.4
26	10.3	9.4	19.1	19.7	4.7	2.6	2.4	8.2	2.6	10.9	9.3
28	10.8	9.6	19.7	20.4	5.3	2.9	2.6	8.3	2.9	11.4	10.3
30	11.3	9.9	20.3	21.2	5.9	3.2	2.8	8.4	3.3	11.9	11.4
32	11.9	10.1	21.0	22.0	6.5	3.5	3.1	8.5	3.6	12.4	12.5
34	12.5	10.4	21.7	22.9	7.3	3.8	3.4	8.7	4.0	13.0	13.8
36	13.2	10.7	22.5	23.9	8.1	4.1	3.6	8.8	4.5	13.7	15.1
38	14.0	11.1	23.4	25.1	9.0	4.4	3.9	9.0	5.0	14.5	16.5
40	14.9	11.4	24.4	26.3	10.0	4.7	4.2	9.1	5.5	15.3	18.0
42	15.9	11.8	25.5	27.7	11.1	5.1	4.6	9.3	6.1	16.2	19.6
44	17.0	12.2	26.7	29.2	12.4	5.5	4.9	9.5	6.9	17.3	21.4
46	18.3	12.6	28.1	31.0	13.8	5.9	5.3	9.6	7.7	18.5	23.3
48	19.9	13.1	29.8	33.0	15.5	6.3	5.7	9.8	8.6	19.9	25.4
50	21.7	13.6	31.6	35.4	17.5	6.8	6.1	10.0	9.7	21.6	27.8
52	24.0	14.2	33.9	38.2	20.0	7.3	6.5	10.3	11.1	23.6	30.5
54	26.8	14.8	36.6	41.6	22.9	7.9	7.0	10.5	12.7	26.1	33.5
56	30.4	15.5	40.1	45.9	26.8	8.5	7.6	10.8	14.8	29.3	37.0
58	35.2	16.3	44.6	51.6	31.9	9.2	8.2	11.1	17.7	33.5	41.2
60	42.2	17.3	51.0	59.5	39.1	9.9	8.9	11.4	21.7	39.6	46.2
62	53.4	18.5	61.1	71.9	50.7	10.9	9.7	11.9	28.1	49.2	52.6
64	75.9	20.0	80.8	95.9	73.8	12.0	10.8	12.4	40.9	68.4	61.6
66	169.8	22.5	160.5	192.3	168.6	13.9	12.4	13.2	93.5	147.3	78.0

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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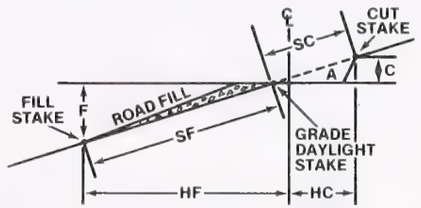
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

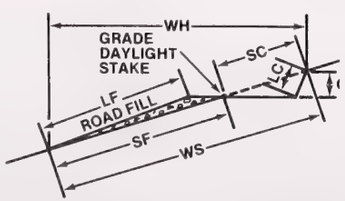
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 14 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.8	8.1	15.8	15.8	1.4	1.0	.8	7.6	.8	8.2	3.0
12	8.0	8.3	16.2	16.3	1.7	1.2	1.0	7.7	1.0	8.4	3.7
14	8.3	8.5	16.6	16.8	2.1	1.5	1.2	7.9	1.2	8.7	4.4
16	8.6	8.7	17.1	17.3	2.5	1.7	1.4	8.0	1.4	9.0	5.2
18	8.9	8.9	17.6	17.8	2.9	2.0	1.6	8.2	1.6	9.4	6.0
20	9.3	9.1	18.1	18.4	3.3	2.2	1.8	8.3	1.8	9.7	6.8
22	9.7	9.4	18.6	19.1	3.7	2.5	2.0	8.5	2.1	10.1	7.7
24	10.1	9.7	19.2	19.8	4.2	2.8	2.3	8.7	2.4	10.5	8.7
26	10.6	10.0	19.9	20.5	4.8	3.1	2.5	8.9	2.7	11.0	9.7
28	11.1	10.3	20.6	21.3	5.4	3.5	2.8	9.1	3.0	11.5	10.8
30	11.6	10.6	21.3	22.2	6.0	3.8	3.1	9.3	3.3	12.0	12.0
32	12.2	11.0	22.1	23.2	6.7	4.2	3.3	9.5	3.7	12.6	13.3
34	12.9	11.4	23.0	24.3	7.5	4.6	3.7	9.7	4.2	13.2	14.6
36	13.7	11.8	23.9	25.4	8.3	5.0	4.0	10.0	4.6	13.9	16.1
38	14.5	12.2	25.0	26.7	9.3	5.4	4.3	10.3	5.2	14.7	17.7
40	15.5	12.7	26.2	28.2	10.4	5.9	4.7	10.5	5.7	15.6	19.4
42	16.6	13.2	27.5	29.8	11.6	6.4	5.1	10.8	6.4	16.6	21.4
44	17.8	13.8	28.9	31.6	12.9	6.9	5.5	11.2	7.2	17.8	23.4
46	19.3	14.4	30.6	33.7	14.5	7.5	6.0	11.5	8.1	19.1	25.8
48	21.0	15.1	32.5	36.1	16.4	8.2	6.5	11.9	9.1	20.6	28.4
50	23.1	15.8	34.8	38.9	18.6	8.8	7.1	12.3	10.3	22.5	31.3
52	25.6	16.6	37.4	42.2	21.3	9.6	7.7	12.8	11.8	24.7	34.6
54	28.7	17.6	40.7	46.3	24.6	10.4	8.4	13.3	13.6	27.4	38.4
56	32.7	18.6	44.8	51.4	28.8	11.4	9.1	13.8	16.0	31.0	43.0
58	38.2	19.9	50.2	58.0	34.5	12.5	10.0	14.5	19.2	35.7	48.4
60	46.1	21.3	57.8	67.4	42.7	13.7	11.0	15.2	23.7	42.6	55.1
62	58.9	23.1	69.6	81.9	55.9	15.2	12.2	16.1	31.0	53.5	63.9
64	84.6	25.5	92.7	110.1	82.2	17.2	13.7	17.3	45.6	75.4	76.5
66	192.6	29.4	185.3	222.0	191.3	20.2	16.2	19.1	106.1	166.2	100.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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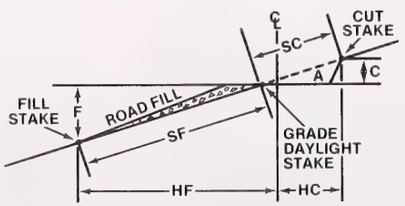
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
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C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

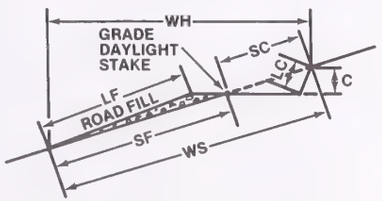
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 14 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.8	8.2	16.0	16.1	1.4	1.2	.8	7.8	.8	8.2	3.0
12	8.1	8.5	16.5	16.6	1.7	1.4	1.0	8.0	1.0	8.4	3.7
14	8.4	8.7	17.0	17.1	2.1	1.7	1.2	8.2	1.2	8.7	4.5
16	8.7	9.0	17.5	17.7	2.5	2.0	1.4	8.4	1.4	9.1	5.3
18	9.1	9.3	18.1	18.3	2.9	2.3	1.6	8.6	1.6	9.4	6.2
20	9.4	9.6	18.7	19.0	3.3	2.7	1.9	8.9	1.9	9.8	7.1
22	9.9	9.9	19.3	19.8	3.8	3.0	2.1	9.1	2.1	10.2	8.0
24	10.3	10.3	20.0	20.6	4.3	3.4	2.4	9.4	2.4	10.6	9.1
26	10.8	10.6	20.8	21.4	4.9	3.8	2.7	9.7	2.7	11.1	10.2
28	11.3	11.0	21.6	22.4	5.5	4.2	3.0	10.0	3.1	11.6	11.4
30	12.0	11.5	22.5	23.4	6.2	4.7	3.3	10.3	3.4	12.2	12.7
32	12.6	12.0	23.4	24.6	6.9	5.2	3.6	10.6	3.8	12.8	14.1
34	13.4	12.5	24.5	25.8	7.8	5.7	4.0	11.0	4.3	13.5	15.7
36	14.2	13.0	25.6	27.2	8.7	6.3	4.4	11.4	4.8	14.2	17.4
38	15.1	13.7	26.9	28.8	9.7	6.9	4.9	11.9	5.4	15.1	19.2
40	16.2	14.3	28.3	30.5	10.8	7.5	5.3	12.3	6.0	16.0	21.3
42	17.4	15.1	29.9	32.5	12.1	8.3	5.8	12.8	6.7	17.1	23.5
44	18.8	15.9	31.8	34.7	13.7	9.1	6.4	13.4	7.6	18.4	26.1
46	20.4	16.8	33.8	37.2	15.4	9.9	7.0	14.0	8.5	19.8	28.9
48	22.4	17.8	36.2	40.2	17.5	10.9	7.7	14.7	9.7	21.5	32.2
50	24.7	19.0	39.1	43.7	19.9	12.0	8.5	15.5	11.1	23.6	35.9
52	27.6	20.2	42.4	47.8	22.9	13.2	9.3	16.3	12.7	26.1	40.2
54	31.2	21.7	46.5	52.9	26.7	14.6	10.3	17.3	14.8	29.2	45.4
56	35.8	23.4	51.7	59.3	31.6	16.2	11.5	18.5	17.5	33.3	51.5
58	42.2	25.5	58.5	67.7	38.2	18.1	12.8	19.8	21.2	38.8	59.1
60	51.5	27.9	68.1	79.5	47.8	20.3	14.4	21.4	26.5	46.8	68.9
62	66.7	31.1	83.1	97.8	63.4	23.1	16.4	23.4	35.2	59.7	82.1
64	97.7	35.3	112.0	133.0	94.9	26.9	19.0	26.0	52.7	86.0	101.9
66	229.0	42.6	226.7	271.6	227.4	33.2	23.5	30.5	126.2	196.2	141.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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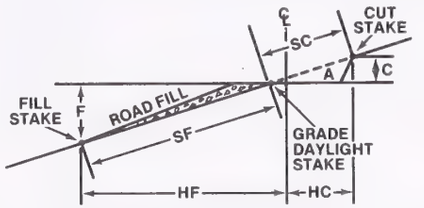
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

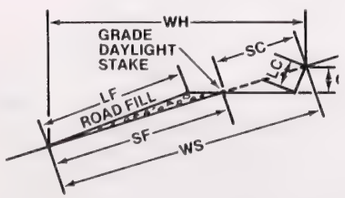
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 14 FEET

CUT SLOPE = 1.5 TO 1

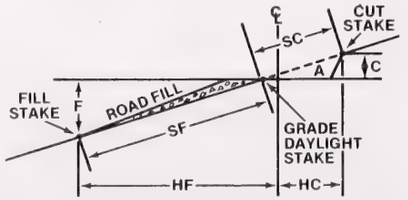
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	7.9	8.6	16.5	16.6	1.4	1.5	.9	8.3	.8	8.2	3.1
12	8.2	8.9	17.1	17.2	1.8	1.9	1.1	8.6	1.0	8.5	3.9
14	8.6	9.3	17.7	17.9	2.1	2.3	1.3	8.9	1.2	8.8	4.7
16	8.9	9.7	18.4	18.7	2.5	2.8	1.5	9.3	1.4	9.1	5.6
18	9.3	10.1	19.2	19.5	3.0	3.2	1.8	9.7	1.7	9.5	6.5
20	9.8	10.6	20.0	20.4	3.5	3.8	2.1	10.1	1.9	9.9	7.6
22	10.3	11.1	20.9	21.4	4.0	4.3	2.4	10.6	2.2	10.3	8.7
24	10.8	11.7	21.9	22.5	4.5	4.9	2.7	11.1	2.5	10.8	9.9
26	11.4	12.3	23.0	23.7	5.2	5.6	3.1	11.7	2.9	11.3	11.3
28	12.0	13.0	24.1	25.1	5.8	6.3	3.5	12.3	3.2	11.9	12.8
30	12.7	13.8	25.5	26.6	6.6	7.2	4.0	13.0	3.7	12.5	14.5
32	13.6	14.7	26.9	28.3	7.5	8.1	4.5	13.7	4.1	13.2	16.3
34	14.5	15.7	28.6	30.2	8.4	9.1	5.1	14.6	4.7	14.0	18.4
36	15.5	16.8	30.4	32.3	9.5	10.3	5.7	15.6	5.3	14.9	20.8
38	16.7	18.1	32.6	34.8	10.7	11.6	6.4	16.7	5.9	15.9	23.4
40	18.1	19.6	35.0	37.7	12.1	13.1	7.3	17.9	6.7	17.1	26.5
42	19.7	21.4	37.8	41.0	13.7	14.9	8.3	19.4	7.6	18.4	30.1
44	21.6	23.4	41.2	45.0	15.7	17.0	9.4	21.1	8.7	20.0	34.3
46	23.8	25.9	45.2	49.7	18.0	19.5	10.8	23.2	10.0	21.9	39.4
48	26.6	28.9	50.0	55.5	20.8	22.5	12.5	25.7	11.5	24.3	45.5
50	30.0	32.6	56.0	62.6	24.2	26.3	14.6	28.9	13.4	27.1	53.1
52	34.4	37.3	63.6	71.7	28.6	31.0	17.2	32.8	15.9	30.8	62.7
54	40.2	43.6	73.7	83.7	34.4	37.3	20.7	38.1	19.1	35.6	75.4
56	48.1	52.2	87.5	100.3	42.4	46.0	25.5	45.2	23.5	42.3	92.9
58	59.7	64.8	107.7	124.5	54.0	58.6	32.5	55.7	30.0	51.9	118.4
60	78.3	84.9	140.0	163.3	72.6	78.8	43.7	72.6	40.3	67.4	159.2
62	112.9	122.4	200.0	235.3	107.2	116.3	64.5	103.8	59.5	96.2	235.0
64	199.3	216.2	350.0	415.5	193.7	210.1	116.5	181.8	107.5	168.2	424.5
66	804.7	872.8	1400.0	1677.4	799.1	866.7	480.8	728.1	443.2	671.9	1751.0

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

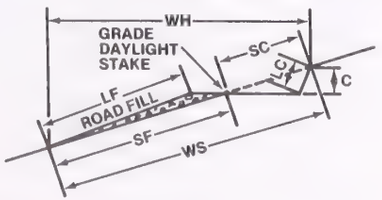
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 15 FEET

CUT SLOPE = VERTICAL

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.1	8.1	16.2	16.3	1.5	.8	.8	7.5	.8	8.7	3.3
12	8.4	8.2	16.5	16.6	1.8	1.0	1.0	7.5	1.0	9.0	4.0
14	8.6	8.3	16.8	17.0	2.2	1.2	1.2	7.5	1.2	9.3	4.8
16	8.9	8.4	17.1	17.3	2.5	1.3	1.3	7.5	1.4	9.6	5.5
18	9.2	8.5	17.4	17.7	2.9	1.5	1.5	7.5	1.6	9.9	6.3
20	9.5	8.6	17.8	18.2	3.4	1.7	1.7	7.5	1.9	10.3	7.2
22	9.9	8.8	18.2	18.6	3.8	1.9	1.9	7.5	2.1	10.7	8.0
24	10.2	8.9	18.6	19.1	4.3	2.1	2.1	7.5	2.4	11.1	8.9
26	10.6	9.0	19.0	19.6	4.8	2.3	2.3	7.5	2.7	11.5	9.9
28	11.1	9.2	19.5	20.2	5.4	2.5	2.5	7.5	3.0	12.0	10.9
30	11.6	9.3	20.0	20.9	6.0	2.7	2.7	7.5	3.3	12.5	11.9
32	12.1	9.5	20.5	21.6	6.6	2.9	2.9	7.5	3.7	13.0	13.0
34	12.7	9.6	21.1	22.3	7.4	3.1	3.1	7.5	4.1	13.6	14.1
36	13.3	9.8	21.8	23.1	8.1	3.3	3.3	7.5	4.5	14.3	15.3
38	14.1	10.0	22.5	24.1	9.0	3.6	3.6	7.5	5.0	15.0	16.6
40	14.9	10.2	23.3	25.1	10.0	3.8	3.8	7.5	5.5	15.8	18.0
42	15.8	10.4	24.2	26.2	11.0	4.0	4.0	7.5	6.1	16.7	19.4
44	16.9	10.7	25.2	27.5	12.2	4.3	4.3	7.5	6.8	17.7	20.9
46	18.1	10.9	26.3	29.0	13.6	4.6	4.6	7.5	7.5	18.8	22.6
48	19.5	11.2	27.6	30.7	15.2	4.8	4.8	7.5	8.4	20.1	24.4
50	21.2	11.5	29.2	32.6	17.1	5.1	5.1	7.5	9.5	21.7	26.4
52	23.2	11.8	31.1	35.0	19.3	5.4	5.4	7.5	10.7	23.6	28.5
54	25.7	12.2	33.3	37.9	22.0	5.8	5.8	7.5	12.2	25.8	30.9
56	28.9	12.6	36.2	41.5	25.5	6.1	6.1	7.5	14.1	28.7	33.6
58	33.3	13.0	40.0	46.3	30.1	6.5	6.5	7.5	16.7	32.5	36.8
60	39.5	13.5	45.5	53.0	36.6	7.0	7.0	7.5	20.3	38.0	40.5
62	49.4	14.2	54.1	63.6	47.0	7.5	7.5	7.5	26.1	46.6	45.1
64	69.3	15.0	71.0	84.4	67.4	8.1	8.1	7.5	37.4	63.5	51.3
66	151.7	16.5	140.4	168.2	150.7	9.1	9.1	7.5	83.6	132.9	62.2

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
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WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
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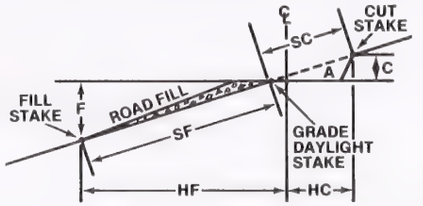
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

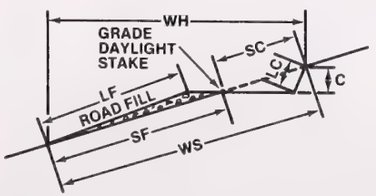
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 15 FEET

CUT SLOPE = .10 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.2	8.2	16.3	16.4	1.5	.8	.8	7.6	.8	8.7	3.3
12	8.4	8.3	16.6	16.7	1.8	1.0	1.0	7.6	1.0	9.0	4.0
14	8.7	8.4	16.9	17.1	2.2	1.2	1.2	7.6	1.2	9.3	4.8
16	8.9	8.5	17.3	17.5	2.5	1.4	1.3	7.6	1.4	9.6	5.6
18	9.2	8.6	17.6	17.9	3.0	1.5	1.5	7.7	1.6	10.0	6.4
20	9.6	8.8	18.0	18.3	3.4	1.7	1.7	7.7	1.9	10.3	7.3
22	9.9	8.9	18.4	18.8	3.8	1.9	1.9	7.7	2.1	10.7	8.1
24	10.3	9.0	18.8	19.4	4.3	2.1	2.1	7.7	2.4	11.1	9.1
26	10.7	9.2	19.3	19.9	4.9	2.3	2.3	7.7	2.7	11.5	10.0
28	11.2	9.4	19.8	20.5	5.4	2.5	2.5	7.8	3.0	12.0	11.1
30	11.7	9.5	20.3	21.2	6.0	2.8	2.7	7.8	3.4	12.5	12.1
32	12.2	9.7	20.9	21.9	6.7	3.0	3.0	7.8	3.7	13.1	13.2
34	12.8	9.9	21.5	22.7	7.4	3.2	3.2	7.8	4.1	13.7	14.4
36	13.5	10.1	22.2	23.6	8.2	3.4	3.4	7.8	4.6	14.4	15.7
38	14.2	10.3	22.9	24.6	9.1	3.7	3.7	7.9	5.1	15.1	17.0
40	15.1	10.6	23.8	25.6	10.1	3.9	3.9	7.9	5.6	15.9	18.4
42	16.0	10.8	24.7	26.8	11.2	4.2	4.2	7.9	6.2	16.8	19.9
44	17.1	11.1	25.8	28.2	12.4	4.5	4.5	7.9	6.9	17.8	21.6
46	18.3	11.3	27.0	29.7	13.8	4.8	4.7	8.0	7.7	19.0	23.3
48	19.8	11.7	28.4	31.5	15.5	5.1	5.0	8.0	8.6	20.4	25.2
50	21.5	12.0	30.0	33.5	17.4	5.4	5.4	8.0	9.6	21.9	27.3
52	23.6	12.3	31.9	36.0	19.7	5.7	5.7	8.1	10.9	23.9	29.6
54	26.2	12.8	34.3	39.0	22.5	6.1	6.1	8.1	12.5	26.2	32.2
56	29.6	13.2	37.3	42.8	26.0	6.5	6.5	8.1	14.4	29.2	35.1
58	34.0	13.7	41.3	47.7	30.8	6.9	6.9	8.2	17.1	33.1	38.4
60	40.4	14.3	46.9	54.7	37.5	7.4	7.4	8.2	20.8	38.7	42.4
62	50.7	15.0	55.9	65.8	48.2	8.0	7.9	8.3	26.7	47.6	47.4
64	71.3	16.0	73.5	87.3	69.3	8.7	8.6	8.4	38.4	65.1	54.3
66	156.5	17.6	145.3	174.1	155.4	9.7	9.7	8.5	86.2	136.8	66.3

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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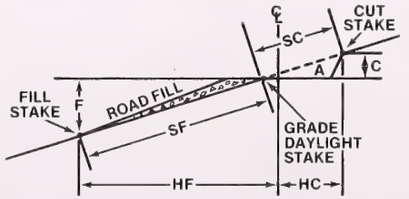
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

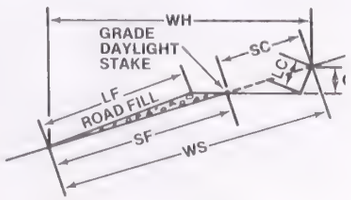
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 15 FEET

CUT SLOPE = .25 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.2	8.3	16.4	16.5	1.5	.9	.8	7.7	.8	8.7	3.3
12	8.5	8.4	16.8	16.9	1.8	1.0	1.0	7.8	1.0	9.0	4.1
14	8.7	8.6	17.1	17.3	2.2	1.2	1.2	7.8	1.2	9.3	4.9
16	9.0	8.7	17.5	17.7	2.6	1.4	1.4	7.8	1.4	9.6	5.7
18	9.3	8.8	17.9	18.2	3.0	1.6	1.6	7.9	1.7	10.0	6.5
20	9.7	9.0	18.3	18.6	3.4	1.8	1.8	7.9	1.9	10.3	7.4
22	10.0	9.1	18.7	19.2	3.9	2.0	2.0	8.0	2.2	10.7	8.3
24	10.4	9.3	19.2	19.7	4.4	2.2	2.2	8.0	2.4	11.1	9.3
26	10.8	9.5	19.7	20.3	4.9	2.5	2.4	8.1	2.7	11.6	10.3
28	11.3	9.7	20.2	21.0	5.5	2.7	2.6	8.2	3.1	12.1	11.3
30	11.8	9.9	20.8	21.7	6.1	2.9	2.8	8.2	3.4	12.6	12.5
32	12.4	10.1	21.4	22.5	6.8	3.2	3.1	8.3	3.8	13.2	13.6
34	13.0	10.3	22.1	23.4	7.6	3.4	3.3	8.3	4.2	13.8	14.9
36	13.7	10.6	22.9	24.3	8.4	3.7	3.6	8.4	4.6	14.5	16.2
38	14.5	10.8	23.7	25.3	9.3	4.0	3.9	8.5	5.2	15.2	17.7
40	15.4	11.1	24.6	26.5	10.3	4.3	4.1	8.5	5.7	16.1	19.2
42	16.4	11.4	25.6	27.8	11.4	4.6	4.4	8.6	6.3	17.0	20.8
44	17.5	11.7	26.8	29.2	12.7	4.9	4.7	8.7	7.0	18.1	22.6
46	18.8	12.1	28.0	30.9	14.2	5.2	5.0	8.8	7.9	19.3	24.5
48	20.3	12.4	29.5	32.8	15.9	5.5	5.4	8.8	8.8	20.7	26.6
50	22.1	12.8	31.3	35.0	17.9	5.9	5.7	8.9	9.9	22.4	28.8
52	24.3	13.3	33.4	37.6	20.2	6.3	6.1	9.0	11.2	24.3	31.4
54	27.1	13.8	35.9	40.8	23.2	6.7	6.5	9.1	12.9	26.8	34.2
56	30.6	14.3	39.2	44.9	26.9	7.2	7.0	9.2	14.9	29.9	37.5
58	35.3	14.9	43.4	50.2	31.9	7.7	7.5	9.4	17.7	34.0	41.3
60	42.0	15.6	49.4	57.7	39.0	8.3	8.0	9.5	21.6	39.9	45.8
62	52.9	16.5	59.0	69.4	50.2	9.0	8.7	9.7	27.9	49.3	51.6
64	74.6	17.7	77.7	92.2	72.5	9.8	9.5	9.9	40.2	67.8	59.4
66	164.7	19.6	153.8	184.3	163.6	11.1	10.8	10.2	90.7	143.6	73.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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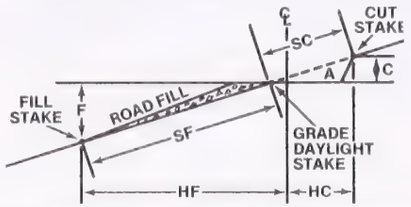
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

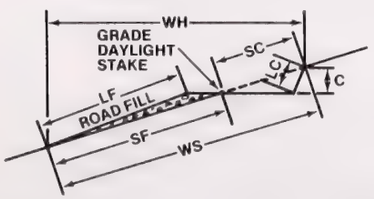
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 15 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.3	8.5	16.7	16.7	1.5	.9	.8	7.9	.8	8.7	3.4
12	8.5	8.6	17.0	17.2	1.8	1.2	1.0	8.0	1.0	9.0	4.1
14	8.8	8.8	17.4	17.6	2.2	1.4	1.2	8.1	1.2	9.3	4.9
16	9.1	9.0	17.9	18.1	2.6	1.6	1.4	8.2	1.4	9.7	5.8
18	9.4	9.2	18.3	18.6	3.0	1.8	1.6	8.3	1.7	10.0	6.7
20	9.8	9.4	18.8	19.2	3.5	2.1	1.8	8.4	1.9	10.4	7.6
22	10.2	9.6	19.3	19.8	3.9	2.3	2.1	8.5	2.2	10.8	8.6
24	10.6	9.8	19.9	20.4	4.5	2.6	2.3	8.6	2.5	11.2	9.6
26	11.1	10.1	20.4	21.1	5.0	2.8	2.5	8.8	2.8	11.7	10.7
28	11.6	10.3	21.1	21.9	5.6	3.1	2.8	8.9	3.1	12.2	11.9
30	12.1	10.6	21.7	22.7	6.3	3.4	3.0	9.0	3.5	12.7	13.1
32	12.7	10.9	22.5	23.6	7.0	3.7	3.3	9.2	3.9	13.3	14.4
34	13.4	11.2	23.3	24.6	7.8	4.0	3.6	9.3	4.3	14.0	15.8
36	14.2	11.5	24.1	25.7	8.6	4.4	3.9	9.4	4.8	14.7	17.3
38	15.0	11.9	25.1	26.8	9.6	4.7	4.2	9.6	5.3	15.5	18.9
40	15.9	12.2	26.1	28.2	10.7	5.1	4.5	9.8	5.9	16.4	20.6
42	17.0	12.6	27.3	29.6	11.9	5.5	4.9	9.9	6.6	17.4	22.5
44	18.2	13.1	28.6	31.3	13.2	5.9	5.3	10.1	7.3	18.5	24.5
46	19.7	13.5	30.1	33.2	14.8	6.3	5.7	10.3	8.2	19.8	26.8
48	21.3	14.0	31.9	35.4	16.6	6.8	6.1	10.5	9.2	21.3	29.2
50	23.3	14.6	33.9	37.9	18.8	7.3	6.5	10.8	10.4	23.1	31.9
52	25.7	15.2	36.3	40.9	21.4	7.8	7.0	11.0	11.9	25.3	35.0
54	28.7	15.9	39.2	44.6	24.6	8.4	7.5	11.3	13.6	28.0	38.5
56	32.6	16.6	42.9	49.2	28.7	9.1	8.1	11.6	15.9	31.4	42.5
58	37.7	17.5	47.8	55.2	34.1	9.8	8.8	11.9	18.9	35.9	47.3
60	45.2	18.5	54.7	63.7	41.9	10.7	9.5	12.3	23.3	42.4	53.0
62	57.2	19.8	65.4	77.0	54.4	11.6	10.4	12.7	30.2	52.7	60.4
64	81.4	21.4	86.6	102.8	79.1	12.9	11.5	13.3	43.9	73.3	70.7
66	181.9	24.1	172.0	206.0	180.7	14.8	13.3	14.1	100.2	157.8	89.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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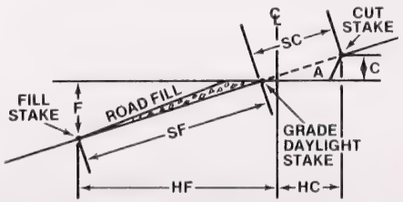
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

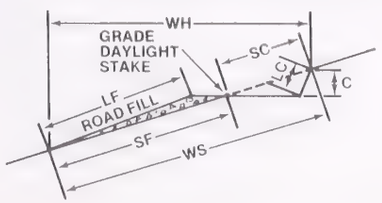
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 15 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.3	8.7	16.9	17.0	1.5	1.1	.9	8.1	.8	8.7	3.4
12	8.6	8.9	17.3	17.5	1.8	1.3	1.1	8.3	1.0	9.0	4.2
14	8.9	9.1	17.8	18.0	2.2	1.6	1.3	8.4	1.2	9.4	5.1
16	9.2	9.3	18.3	18.5	2.6	1.8	1.5	8.6	1.5	9.7	5.9
18	9.6	9.5	18.8	19.1	3.1	2.1	1.7	8.8	1.7	10.0	6.9
20	10.0	9.8	19.4	19.8	3.5	2.4	1.9	8.9	2.0	10.4	7.8
22	10.4	10.1	20.0	20.4	4.0	2.7	2.2	9.1	2.2	10.8	8.9
24	10.8	10.4	20.6	21.2	4.6	3.0	2.4	9.3	2.5	11.3	10.0
26	11.3	10.7	21.3	22.0	5.1	3.4	2.7	9.5	2.8	11.8	11.2
28	11.9	11.0	22.0	22.9	5.8	3.7	3.0	9.7	3.2	12.3	12.4
30	12.4	11.4	22.8	23.8	6.4	4.1	3.3	10.0	3.6	12.9	13.8
32	13.1	11.8	23.7	24.9	7.2	4.5	3.6	10.2	4.0	13.5	15.2
34	13.8	12.2	24.6	26.0	8.0	4.9	3.9	10.4	4.5	14.2	16.8
36	14.6	12.6	25.6	27.3	8.9	5.3	4.3	10.7	5.0	14.9	18.5
38	15.6	13.1	26.8	28.6	10.0	5.8	4.6	11.0	5.5	15.8	20.3
40	16.6	13.6	28.0	30.2	11.1	6.3	5.1	11.3	6.2	16.7	22.3
42	17.8	14.2	29.4	31.9	12.4	6.9	5.5	11.6	6.9	17.8	24.5
44	19.1	14.8	31.0	33.9	13.9	7.4	5.9	12.0	7.7	19.0	26.9
46	20.7	15.4	32.8	36.1	15.6	8.1	6.4	12.3	8.6	20.5	29.6
48	22.5	16.1	34.9	38.7	17.6	8.7	7.0	12.7	9.7	22.1	32.6
50	24.7	16.9	37.3	41.7	19.9	9.5	7.6	13.2	11.0	24.1	35.9
52	27.4	17.8	40.1	45.2	22.8	10.3	8.2	13.7	12.6	26.5	39.7
54	30.7	18.8	43.6	49.6	26.3	11.2	9.0	14.2	14.6	29.4	44.1
56	35.1	20.0	48.0	55.0	30.9	12.2	9.8	14.8	17.1	33.2	49.3
58	40.9	21.3	53.8	62.2	37.0	13.3	10.7	15.5	20.5	38.3	55.5
60	49.4	22.8	61.9	72.2	45.8	14.7	11.7	16.3	25.4	45.6	63.2
62	63.1	24.7	74.6	87.8	59.9	16.3	13.0	17.3	33.2	57.3	73.3
64	90.7	27.3	99.3	117.9	88.1	18.4	14.7	18.5	48.9	80.8	87.8
66	206.4	31.5	198.5	237.9	205.0	21.7	17.4	20.5	113.7	178.0	115.2

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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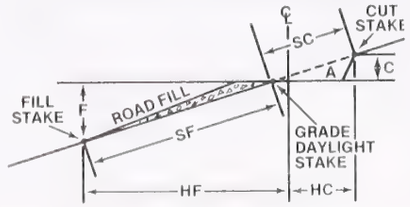
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

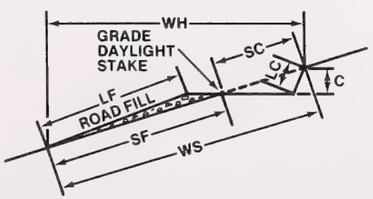
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 15 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.4	8.8	17.1	17.2	1.5	1.2	.9	8.4	.8	8.8	3.5
12	8.7	9.1	17.6	17.8	1.9	1.5	1.1	8.6	1.0	9.1	4.3
14	9.0	9.3	18.2	18.3	2.2	1.8	1.3	8.8	1.2	9.4	5.2
16	9.3	9.6	18.7	19.0	2.7	2.2	1.5	9.0	1.5	9.7	6.1
18	9.7	9.9	19.3	19.7	3.1	2.5	1.8	9.3	1.7	10.1	7.1
20	10.1	10.3	20.0	20.4	3.6	2.8	2.0	9.5	2.0	10.5	8.1
22	10.6	10.6	20.7	21.2	4.1	3.2	2.3	9.8	2.3	10.9	9.2
24	11.0	11.0	21.4	22.0	4.6	3.6	2.6	10.1	2.6	11.4	10.4
26	11.6	11.4	22.2	23.0	5.3	4.1	2.9	10.4	2.9	11.9	11.7
28	12.2	11.8	23.1	24.0	5.9	4.5	3.2	10.7	3.3	12.4	13.1
30	12.8	12.3	24.1	25.1	6.6	5.0	3.5	11.0	3.7	13.0	14.6
32	13.5	12.8	25.1	26.3	7.4	5.5	3.9	11.4	4.1	13.7	16.2
34	14.3	13.4	26.2	27.7	8.3	6.1	4.3	11.8	4.6	14.4	18.0
36	15.2	14.0	27.5	29.2	9.3	6.7	4.7	12.2	5.2	15.2	19.9
38	16.2	14.6	28.8	30.8	10.4	7.4	5.2	12.7	5.8	16.1	22.1
40	17.3	15.4	30.4	32.7	11.6	8.1	5.7	13.2	6.4	17.2	24.4
42	18.6	16.2	32.1	34.8	13.0	8.8	6.3	13.8	7.2	18.3	27.0
44	20.2	17.0	34.0	37.2	14.6	9.7	6.9	14.4	8.1	19.7	29.9
46	21.9	18.0	36.3	39.9	16.5	10.6	7.5	15.0	9.2	21.2	33.2
48	24.0	19.1	38.8	43.1	18.7	11.7	8.3	15.8	10.4	23.1	36.9
50	26.5	20.3	41.8	46.8	21.3	12.8	9.1	16.6	11.8	25.3	41.2
52	29.5	21.7	45.4	51.2	24.6	14.1	10.0	17.5	13.6	27.9	46.2
54	33.4	23.3	49.8	56.7	28.6	15.6	11.1	18.6	15.9	31.3	52.1
56	38.4	25.1	55.4	63.5	33.8	17.4	12.3	19.8	18.8	35.6	59.1
58	45.2	27.3	62.7	72.5	40.9	19.4	13.7	21.2	22.7	41.5	67.9
60	55.2	29.9	73.0	85.1	51.2	21.8	15.4	22.9	28.4	50.1	79.1
62	71.5	33.3	89.0	104.8	67.9	24.8	17.5	25.0	37.7	64.0	94.2
64	104.7	37.8	120.0	142.5	101.7	28.8	20.4	27.9	56.4	92.1	117.0
66	245.4	45.6	242.9	291.0	243.7	35.6	25.1	32.6	135.2	210.2	162.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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LF = LENGTH OF FILL SLOPE
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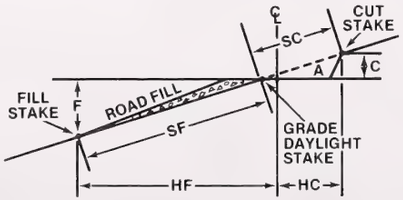
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

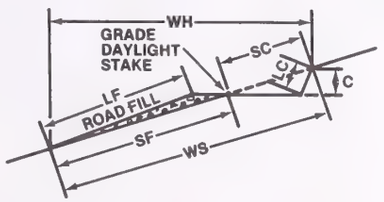
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 15 FEET

CUT SLOPE = 1.5 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.5	9.2	17.6	17.7	1.5	1.7	.9	8.9	.8	8.8	3.6
12	8.8	9.6	18.3	18.4	1.9	2.1	1.1	9.2	1.1	9.1	4.5
14	9.2	10.0	19.0	19.2	2.3	2.5	1.4	9.6	1.3	9.4	5.4
16	9.6	10.4	19.7	20.0	2.7	3.0	1.6	10.0	1.5	9.8	6.4
18	10.0	10.9	20.5	20.9	3.2	3.5	1.9	10.4	1.8	10.2	7.5
20	10.5	11.4	21.4	21.9	3.7	4.0	2.2	10.8	2.1	10.6	8.7
22	11.0	11.9	22.4	22.9	4.3	4.6	2.6	11.3	2.4	11.0	10.0
24	11.6	12.5	23.4	24.1	4.9	5.3	2.9	11.9	2.7	11.5	11.4
26	12.2	13.2	24.6	25.4	5.5	6.0	3.3	12.5	3.1	12.1	13.0
28	12.9	14.0	25.9	26.9	6.3	6.8	3.8	13.2	3.5	12.7	14.7
30	13.7	14.8	27.3	28.5	7.1	7.7	4.3	13.9	3.9	13.4	16.6
32	14.5	15.8	28.8	30.3	8.0	8.7	4.8	14.7	4.4	14.1	18.7
34	15.5	16.8	30.6	32.3	9.0	9.8	5.4	15.6	5.0	15.0	21.1
36	16.6	18.0	32.6	34.7	10.2	11.0	6.1	16.7	5.6	15.9	23.8
38	17.9	19.4	34.9	37.3	11.5	12.4	6.9	17.8	6.4	17.0	26.9
40	19.4	21.0	37.5	40.4	13.0	14.1	7.8	19.2	7.2	18.3	30.5
42	21.1	22.9	40.5	44.0	14.7	16.0	8.9	20.8	8.2	19.8	34.6
44	23.1	25.1	44.1	48.2	16.8	18.2	10.1	22.7	9.3	21.5	39.4
46	25.5	27.7	48.4	53.3	19.2	20.9	11.6	24.9	10.7	23.5	45.2
48	28.5	30.9	53.6	59.4	22.2	24.1	13.4	27.6	12.3	26.0	52.2
50	32.2	34.9	60.0	67.1	25.9	28.1	15.6	30.9	14.4	29.1	60.9
52	36.9	40.0	68.2	76.8	30.7	33.3	18.4	35.2	17.0	33.0	72.0
54	43.0	46.7	78.9	89.7	36.9	40.0	22.2	40.8	20.5	38.2	86.6
56	51.5	55.9	93.7	107.4	45.4	49.2	27.3	48.5	25.2	45.3	106.6
58	64.0	69.4	115.4	133.4	57.9	62.8	34.8	59.7	32.1	55.7	135.9
60	83.9	91.0	150.0	174.9	77.8	84.4	46.8	77.7	43.2	72.3	182.7
62	120.9	131.2	214.3	252.1	114.9	124.6	69.1	111.2	63.7	103.1	269.7
64	213.6	231.7	375.0	445.2	207.5	225.1	124.9	194.8	115.1	180.2	487.3
66	862.1	935.1	1500.0	1797.2	856.1	928.6	515.1	780.2	474.9	719.8	2010.1

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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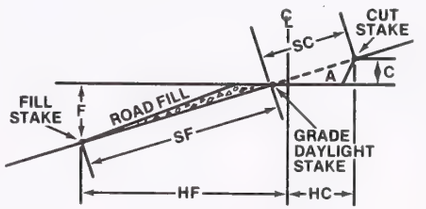
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

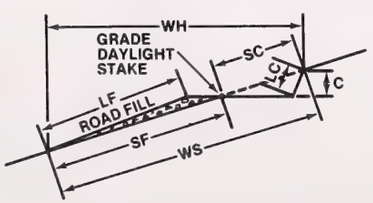
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 16 FEET

CUT SLOPE = VERTICAL

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.7	8.7	17.3	17.4	1.6	.9	.9	8.0	.9	9.3	3.7
12	8.9	8.8	17.6	17.7	1.9	1.0	1.0	8.0	1.1	9.6	4.6
14	9.2	8.9	17.9	18.1	2.3	1.2	1.2	8.0	1.3	9.9	5.4
16	9.5	9.0	18.3	18.5	2.7	1.4	1.4	8.0	1.5	10.3	6.3
18	9.8	9.1	18.6	18.9	3.1	1.6	1.6	8.0	1.7	10.6	7.2
20	10.2	9.2	19.0	19.4	3.6	1.8	1.8	8.0	2.0	11.0	8.2
22	10.5	9.3	19.4	19.9	4.1	2.0	2.0	8.0	2.3	11.4	9.1
24	10.9	9.5	19.8	20.4	4.6	2.2	2.2	8.0	2.5	11.8	10.2
26	11.3	9.6	20.3	21.0	5.1	2.4	2.4	8.0	2.9	12.3	11.2
28	11.8	9.8	20.8	21.6	5.7	2.6	2.6	8.0	3.2	12.8	12.4
30	12.3	9.9	21.3	22.3	6.4	2.9	2.9	8.0	3.5	13.3	13.5
32	12.9	10.1	21.9	23.0	7.1	3.1	3.1	8.0	3.9	13.9	14.8
34	13.5	10.3	22.5	23.8	7.9	3.3	3.3	8.0	4.4	14.5	16.1
36	14.2	10.5	23.2	24.7	8.7	3.5	3.5	8.0	4.8	15.2	17.4
38	15.0	10.7	24.0	25.7	9.6	3.8	3.8	8.0	5.3	16.0	18.9
40	15.9	10.9	24.8	26.8	10.6	4.0	4.0	8.0	5.9	16.8	20.4
42	16.9	11.1	25.8	28.0	11.8	4.3	4.3	8.0	6.5	17.8	22.1
44	18.0	11.4	26.9	29.3	13.1	4.6	4.6	8.0	7.2	18.9	23.8
46	19.3	11.6	28.1	30.9	14.5	4.9	4.9	8.0	8.1	20.1	25.7
48	20.8	11.9	29.5	32.7	16.2	5.2	5.2	8.0	9.0	21.5	27.8
50	22.6	12.2	31.1	34.8	18.2	5.5	5.5	8.0	10.1	23.1	30.0
52	24.7	12.6	33.1	37.3	20.6	5.8	5.8	8.0	11.4	25.1	32.4
54	27.4	13.0	35.6	40.4	23.5	6.2	6.2	8.0	13.0	27.6	35.2
56	30.9	13.4	38.6	44.3	27.2	6.5	6.5	8.0	15.1	30.6	38.3
58	35.5	13.9	42.7	49.4	32.1	7.0	7.0	8.0	17.8	34.7	41.8
60	42.1	14.4	48.5	56.6	39.1	7.4	7.4	8.0	21.7	40.5	46.0
62	52.7	15.1	57.7	67.9	50.1	8.0	8.0	8.0	27.8	49.7	51.3
64	73.9	16.0	75.8	90.0	71.8	8.6	8.6	8.0	39.9	67.8	58.4
66	161.8	17.6	149.7	179.4	160.7	9.7	9.7	8.0	89.1	141.7	70.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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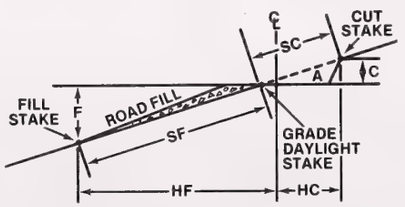
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

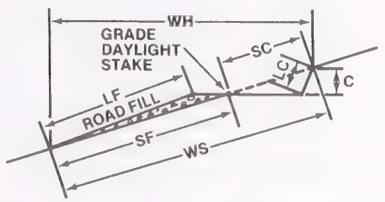
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 16 FEET

CUT SLOPE = .10 TO 1

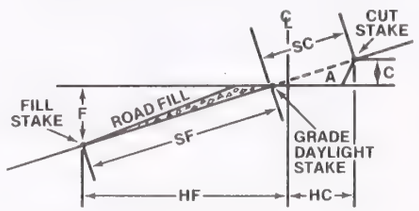
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.7	8.8	17.4	17.5	1.6	.9	.9	8.1	.9	9.3	3.8
12	9.0	8.9	17.7	17.8	1.9	1.1	1.1	8.1	1.1	9.6	4.6
14	9.2	9.0	18.0	18.2	2.3	1.3	1.2	8.1	1.3	9.9	5.5
16	9.5	9.1	18.4	18.6	2.7	1.4	1.4	8.1	1.5	10.3	6.4
18	9.9	9.2	18.8	19.1	3.1	1.6	1.6	8.2	1.7	10.6	7.3
20	10.2	9.4	19.2	19.6	3.6	1.8	1.8	8.2	2.0	11.0	8.3
22	10.6	9.5	19.6	20.1	4.1	2.1	2.0	8.2	2.3	11.4	9.3
24	11.0	9.7	20.1	20.6	4.6	2.3	2.3	8.2	2.6	11.8	10.3
26	11.4	9.8	20.6	21.2	5.2	2.5	2.5	8.2	2.9	12.3	11.4
28	11.9	10.0	21.1	21.9	5.8	2.7	2.7	8.3	3.2	12.8	12.6
30	12.4	10.2	21.7	22.6	6.4	2.9	2.9	8.3	3.6	13.4	13.8
32	13.0	10.4	22.3	23.4	7.2	3.2	3.2	8.3	4.0	14.0	15.1
34	13.7	10.6	22.9	24.2	7.9	3.4	3.4	8.3	4.4	14.6	16.4
36	14.4	10.8	23.7	25.2	8.8	3.7	3.7	8.4	4.9	15.3	17.8
38	15.2	11.0	24.5	26.2	9.7	3.9	3.9	8.4	5.4	16.1	19.4
40	16.1	11.3	25.4	27.3	10.8	4.2	4.2	8.4	6.0	17.0	21.0
42	17.1	11.5	26.4	28.6	11.9	4.5	4.5	8.4	6.6	17.9	22.7
44	18.2	11.8	27.5	30.0	13.2	4.8	4.8	8.5	7.3	19.0	24.5
46	19.6	12.1	28.8	31.7	14.7	5.1	5.1	8.5	8.2	20.3	26.5
48	21.1	12.4	30.3	33.6	16.5	5.4	5.4	8.5	9.1	21.7	28.7
50	23.0	12.8	32.0	35.8	18.5	5.7	5.7	8.6	10.3	23.4	31.1
52	25.2	13.2	34.1	38.4	21.0	6.1	6.1	8.6	11.6	25.4	33.7
54	28.0	13.6	36.6	41.6	24.0	6.5	6.5	8.6	13.3	27.9	36.6
56	31.5	14.1	39.8	45.6	27.8	6.9	6.9	8.7	15.4	31.1	39.9
58	36.3	14.6	44.1	50.9	32.8	7.4	7.3	8.7	18.2	35.3	43.7
60	43.1	15.3	50.1	58.4	40.0	7.9	7.9	8.8	22.2	41.3	48.3
62	54.1	16.0	59.6	70.1	51.4	8.5	8.4	8.8	28.5	50.8	54.0
64	76.0	17.0	78.4	93.1	73.9	9.2	9.2	8.9	41.0	69.5	61.7
66	167.0	18.7	155.0	185.7	165.8	10.4	10.3	9.0	92.0	145.9	75.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

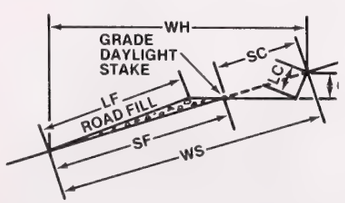
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 16 FEET

CUT SLOPE = .25 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.8	8.9	17.5	17.6	1.6	.9	.9	8.2	.9	9.3	3.8
12	9.0	9.0	17.9	18.0	1.9	1.1	1.1	8.3	1.1	9.6	4.6
14	9.3	9.1	18.3	18.4	2.3	1.3	1.3	8.3	1.3	9.9	5.5
16	9.6	9.3	18.6	18.9	2.7	1.5	1.5	8.4	1.5	10.3	6.4
18	9.9	9.4	19.1	19.4	3.2	1.7	1.7	8.4	1.8	10.6	7.4
20	10.3	9.6	19.5	19.9	3.6	1.9	1.9	8.5	2.0	11.0	8.4
22	10.7	9.8	20.0	20.4	4.1	2.2	2.1	8.5	2.3	11.4	9.4
24	11.1	9.9	20.5	21.0	4.7	2.4	2.3	8.6	2.6	11.9	10.5
26	11.6	10.1	21.0	21.7	5.2	2.6	2.6	8.6	2.9	12.4	11.7
28	12.1	10.3	21.6	22.4	5.9	2.9	2.8	8.7	3.3	12.9	12.9
30	12.6	10.6	22.2	23.2	6.5	3.1	3.0	8.8	3.6	13.4	14.2
32	13.2	10.8	22.9	24.0	7.3	3.4	3.3	8.8	4.0	14.0	15.5
34	13.9	11.0	23.6	24.9	8.1	3.7	3.6	8.9	4.5	14.7	17.0
36	14.6	11.3	24.4	25.9	8.9	3.9	3.8	9.0	5.0	15.4	18.5
38	15.5	11.6	25.3	27.0	9.9	4.2	4.1	9.0	5.5	16.2	20.1
40	16.4	11.9	26.2	28.3	11.0	4.5	4.4	9.1	6.1	17.1	21.8
42	17.5	12.2	27.3	29.6	12.2	4.9	4.7	9.2	6.8	18.1	23.7
44	18.7	12.5	28.5	31.2	13.5	5.2	5.0	9.3	7.5	19.3	25.7
46	20.1	12.9	29.9	32.9	15.1	5.5	5.4	9.3	8.4	20.6	27.8
48	21.7	13.3	31.5	35.0	16.9	5.9	5.7	9.4	9.4	22.1	30.2
50	23.6	13.7	33.4	37.3	19.0	6.3	6.1	9.5	10.6	23.8	32.8
52	26.0	14.2	35.6	40.1	21.6	6.7	6.5	9.6	12.0	26.0	35.7
54	28.9	14.7	38.3	43.6	24.7	7.2	7.0	9.7	13.7	28.6	39.0
56	32.6	15.3	41.8	47.9	28.7	7.7	7.5	9.9	15.9	31.9	42.7
58	37.6	15.9	46.3	53.5	34.0	8.2	8.0	10.0	18.9	36.3	47.0
60	44.8	16.7	52.7	61.5	41.6	8.8	8.6	10.1	23.1	42.6	52.2
62	56.4	17.6	62.9	74.0	53.6	9.6	9.3	10.3	29.7	52.6	58.7
64	79.5	18.8	82.9	98.4	77.3	10.5	10.1	10.5	42.9	72.3	67.6
66	175.7	20.9	164.0	196.5	174.5	11.8	11.5	10.9	96.8	153.2	83.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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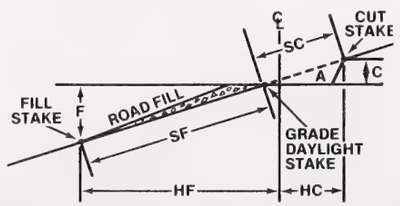
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

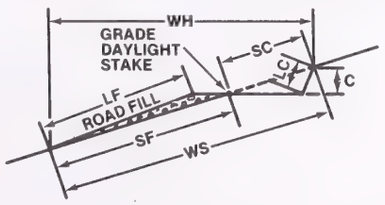
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 16 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.8	9.0	17.8	17.9	1.6	1.0	.9	8.4	.9	9.3	3.8
12	9.1	9.2	18.2	18.3	2.0	1.2	1.1	8.5	1.1	9.6	4.7
14	9.4	9.4	18.6	18.8	2.3	1.5	1.3	8.7	1.3	10.0	5.6
16	9.7	9.6	19.1	19.3	2.8	1.7	1.5	8.8	1.5	10.3	6.6
18	10.1	9.8	19.5	19.9	3.2	1.9	1.7	8.9	1.8	10.7	7.6
20	10.5	10.0	20.1	20.5	3.7	2.2	2.0	9.0	2.1	11.1	8.7
22	10.9	10.2	20.6	21.1	4.2	2.5	2.2	9.1	2.3	11.5	9.8
24	11.3	10.5	21.2	21.8	4.8	2.7	2.4	9.2	2.6	12.0	10.9
26	11.8	10.7	21.8	22.5	5.4	3.0	2.7	9.3	3.0	12.5	12.2
28	12.3	11.0	22.5	23.3	6.0	3.3	3.0	9.5	3.3	13.0	13.5
30	12.9	11.3	23.2	24.2	6.7	3.6	3.2	9.6	3.7	13.6	14.9
32	13.6	11.6	24.0	25.2	7.5	3.9	3.5	9.8	4.1	14.2	16.4
34	14.3	11.9	24.8	26.2	8.3	4.3	3.8	9.9	4.6	14.9	18.0
36	15.1	12.3	25.7	27.4	9.2	4.6	4.2	10.1	5.1	15.7	19.7
38	16.0	12.6	26.8	28.6	10.2	5.0	4.5	10.2	5.7	16.5	21.5
40	17.0	13.0	27.9	30.0	11.4	5.4	4.8	10.4	6.3	17.5	23.5
42	18.1	13.5	29.1	31.6	12.7	5.8	5.2	10.6	7.0	18.5	25.6
44	19.5	13.9	30.6	33.4	14.1	6.3	5.6	10.8	7.8	19.8	27.9
46	21.0	14.4	32.2	35.4	15.8	6.7	6.0	11.0	8.8	21.1	30.4
48	22.7	15.0	34.0	37.7	17.7	7.2	6.5	11.2	9.8	22.8	33.2
50	24.9	15.6	36.2	40.4	20.0	7.8	7.0	11.5	11.1	24.7	36.3
52	27.4	16.2	38.7	43.6	22.8	8.4	7.5	11.7	12.7	27.0	39.8
54	30.6	16.9	41.8	47.6	26.2	9.0	8.0	12.0	14.5	29.8	43.8
56	34.7	17.8	45.8	52.5	30.6	9.7	8.7	12.3	17.0	33.4	48.4
58	40.3	18.7	51.0	58.9	36.4	10.5	9.4	12.7	20.2	38.3	53.8
60	48.2	19.8	58.3	68.0	44.7	11.4	10.2	13.1	24.8	45.2	60.3
62	61.0	21.1	69.8	82.1	58.0	12.4	11.1	13.6	32.2	56.3	68.7
64	86.8	22.8	92.3	109.6	84.3	13.8	12.3	14.2	46.8	78.2	80.5
66	194.1	25.7	183.4	219.8	192.7	15.8	14.2	15.1	106.9	168.4	101.9

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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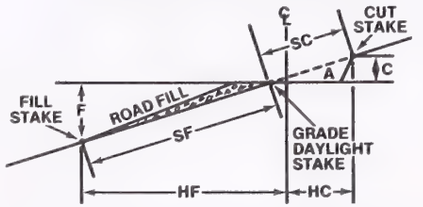
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST, TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

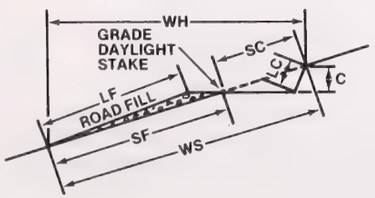
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 16 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.9	9.2	18.0	18.1	1.6	1.1	.9	8.7	.9	9.3	3.9
12	9.2	9.4	18.5	18.6	2.0	1.4	1.1	8.8	1.1	9.6	4.8
14	9.5	9.7	19.0	19.2	2.4	1.7	1.3	9.0	1.3	10.0	5.7
16	9.8	9.9	19.5	19.8	2.8	2.0	1.6	9.2	1.6	10.3	6.8
18	10.2	10.2	20.1	20.4	3.3	2.3	1.8	9.4	1.8	10.7	7.8
20	10.6	10.5	20.7	21.1	3.8	2.6	2.0	9.5	2.1	11.1	8.9
22	11.1	10.7	21.3	21.8	4.3	2.9	2.3	9.7	2.4	11.6	10.1
24	11.5	11.1	22.0	22.6	4.9	3.2	2.6	9.9	2.7	12.0	11.4
26	12.1	11.4	22.7	23.5	5.5	3.6	2.9	10.2	3.0	12.6	12.7
28	12.6	11.7	23.5	24.4	6.1	4.0	3.2	10.4	3.4	13.1	14.2
30	13.3	12.1	24.3	25.4	6.9	4.4	3.5	10.6	3.8	13.7	15.7
32	14.0	12.5	25.3	26.5	7.7	4.8	3.8	10.9	4.3	14.4	17.3
34	14.8	13.0	26.3	27.7	8.6	5.2	4.2	11.1	4.7	15.1	19.1
36	15.6	13.5	27.4	29.1	9.5	5.7	4.6	11.4	5.3	15.9	21.0
38	16.6	14.0	28.6	30.6	10.6	6.2	5.0	11.7	5.9	16.8	23.1
40	17.7	14.5	29.9	32.2	11.8	6.7	5.4	12.0	6.6	17.9	25.4
42	18.9	15.1	31.4	34.0	13.2	7.3	5.8	12.4	7.3	19.0	27.9
44	20.4	15.7	33.1	36.1	14.8	7.9	6.3	12.8	8.2	20.3	30.6
46	22.0	16.5	35.0	38.5	16.6	8.6	6.9	13.2	9.2	21.8	33.7
48	24.0	17.2	37.2	41.2	18.7	9.3	7.5	13.6	10.4	23.6	37.0
50	26.4	18.1	39.7	44.4	21.2	10.1	8.1	14.1	11.8	25.7	40.9
52	29.2	19.0	42.8	48.2	24.3	11.0	8.8	14.6	13.5	28.2	45.2
54	32.8	20.1	46.5	52.9	28.1	11.9	9.5	15.2	15.6	31.4	50.2
56	37.4	21.3	51.2	58.7	32.9	13.0	10.4	15.8	18.3	35.4	56.1
58	43.6	22.7	57.4	66.3	39.5	14.2	11.4	16.5	21.9	40.8	63.2
60	52.7	24.4	66.0	77.0	48.8	15.7	12.5	17.4	27.1	48.6	71.9
62	67.3	26.4	79.6	93.6	63.9	17.4	13.9	18.4	35.4	61.2	83.4
64	96.7	29.1	106.0	125.8	94.0	19.6	15.7	19.8	52.1	86.2	99.9
66	220.2	33.6	211.8	253.8	218.6	23.1	18.5	21.9	121.3	189.9	131.1

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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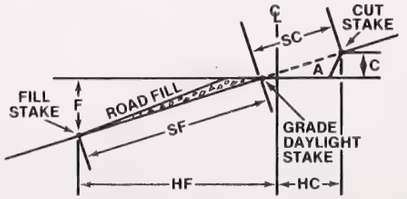
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

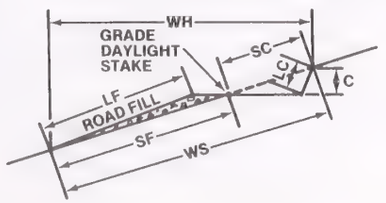
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 16 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	8.9	9.4	18.3	18.4	1.6	1.3	.9	8.9	.9	9.3	4.0
12	9.3	9.7	18.8	18.9	2.0	1.6	1.2	9.2	1.1	9.7	4.9
14	9.6	10.0	19.4	19.6	2.4	2.0	1.4	9.4	1.3	10.0	5.9
16	10.0	10.3	20.0	20.2	2.8	2.3	1.6	9.6	1.6	10.4	6.9
18	10.4	10.6	20.6	21.0	3.3	2.7	1.9	9.9	1.8	10.8	8.0
20	10.8	11.0	21.3	21.7	3.8	3.0	2.1	10.1	2.1	11.2	9.2
22	11.3	11.3	22.1	22.6	4.4	3.4	2.4	10.4	2.4	11.6	10.5
24	11.8	11.7	22.9	23.5	5.0	3.9	2.7	10.7	2.7	12.1	11.9
26	12.3	12.2	23.7	24.5	5.6	4.3	3.1	11.1	3.1	12.7	13.3
28	13.0	12.6	24.7	25.6	6.3	4.8	3.4	11.4	3.5	13.2	14.9
30	13.7	13.1	25.7	26.8	7.1	5.3	3.8	11.8	3.9	13.9	16.6
32	14.4	13.7	26.8	28.1	7.9	5.9	4.2	12.2	4.4	14.6	18.5
34	15.3	14.3	28.0	29.5	8.9	6.5	4.6	12.6	4.9	15.4	20.5
36	16.2	14.9	29.3	31.1	9.9	7.1	5.1	13.1	5.5	16.2	22.7
38	17.3	15.6	30.8	32.9	11.1	7.8	5.5	13.5	6.1	17.2	25.1
40	18.5	16.4	32.4	34.9	12.4	8.6	6.1	14.1	6.9	18.3	27.8
42	19.9	17.2	34.2	37.1	13.9	9.4	6.7	14.7	7.7	19.6	30.7
44	21.5	18.2	36.3	39.7	15.6	10.3	7.3	15.3	8.7	21.0	34.1
46	23.4	19.2	38.7	42.6	17.6	11.3	8.0	16.0	9.8	22.6	37.8
48	25.6	20.4	41.4	45.9	20.0	12.5	8.8	16.8	11.1	24.6	42.0
50	28.2	21.7	44.6	49.9	22.8	13.7	9.7	17.7	12.6	26.9	46.9
52	31.5	23.1	48.5	54.6	26.2	15.1	10.7	18.7	14.5	29.8	52.6
54	35.6	24.8	53.2	60.4	30.5	16.7	11.8	19.8	16.9	33.4	59.2
56	41.0	26.8	59.1	67.7	36.1	18.5	13.1	21.1	20.0	38.0	67.3
58	48.2	29.1	66.9	77.3	43.6	20.7	14.6	22.6	24.2	44.3	77.2
60	58.9	31.9	77.9	90.8	54.6	23.2	16.4	24.4	30.3	53.4	90.0
62	76.2	35.5	95.0	111.7	72.4	26.5	18.7	26.7	40.2	68.3	107.2
64	111.6	40.4	128.0	152.0	108.5	30.8	21.8	29.8	60.2	98.3	133.1
66	261.7	48.7	259.1	310.4	259.9	37.9	26.8	34.8	144.2	224.3	185.3

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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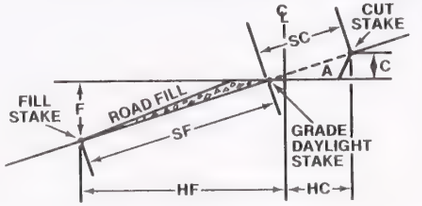
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

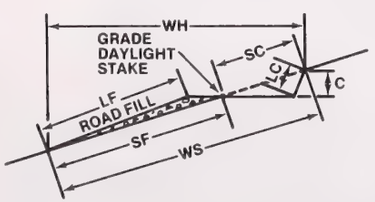
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 16 FEET

CUT SLOPE = 1.5 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.1	9.8	18.8	18.9	1.6	1.8	1.0	9.5	.9	9.4	4.1
12	9.4	10.2	19.5	19.7	2.0	2.2	1.2	9.8	1.1	9.7	5.1
14	9.8	10.6	20.3	20.5	2.5	2.7	1.5	10.2	1.4	10.0	6.1
16	10.2	11.1	21.1	21.3	2.9	3.2	1.8	10.6	1.6	10.4	7.3
18	10.7	11.6	21.9	22.3	3.4	3.7	2.1	11.1	1.9	10.8	8.5
20	11.2	12.1	22.9	23.3	4.0	4.3	2.4	11.6	2.2	11.3	9.9
22	11.7	12.7	23.9	24.5	4.5	4.9	2.7	12.1	2.5	11.8	11.4
24	12.3	13.4	25.0	25.7	5.2	5.6	3.1	12.7	2.9	12.3	13.0
26	13.0	14.1	26.2	27.1	5.9	6.4	3.5	13.3	3.3	12.9	14.8
28	13.7	14.9	27.6	28.6	6.7	7.2	4.0	14.0	3.7	13.6	16.7
30	14.6	15.8	29.1	30.4	7.5	8.2	4.5	14.8	4.2	14.3	18.9
32	15.5	16.8	30.8	32.3	8.5	9.2	5.1	15.7	4.7	15.1	21.3
34	16.5	17.9	32.7	34.5	9.6	10.4	5.8	16.7	5.3	16.0	24.0
36	17.7	19.2	34.8	37.0	10.8	11.7	6.5	17.8	6.0	17.0	27.1
38	19.1	20.7	37.2	39.8	12.2	13.3	7.4	19.0	6.8	18.2	30.6
40	20.7	22.4	40.0	43.1	13.8	15.0	8.3	20.5	7.7	19.5	34.7
42	22.5	24.4	43.2	46.9	15.7	17.0	9.4	22.2	8.7	21.1	39.3
44	24.7	26.8	47.1	51.4	17.9	19.4	10.8	24.2	9.9	22.9	44.8
46	27.3	29.6	51.6	56.8	20.5	22.3	12.4	26.5	11.4	25.1	51.4
48	30.4	33.0	57.1	63.4	23.7	25.7	14.3	29.4	13.2	27.7	59.4
50	34.3	37.2	64.0	71.6	27.7	30.0	16.6	33.0	15.4	31.0	69.3
52	39.3	42.7	72.7	82.0	32.7	35.5	19.7	37.5	18.1	35.2	81.9
54	45.9	49.8	84.2	95.7	39.3	42.7	23.7	43.5	21.8	40.7	98.5
56	55.0	59.6	100.0	114.6	48.4	52.5	29.1	51.7	26.9	48.3	121.3
58	68.3	74.0	123.1	142.3	61.7	67.0	37.1	63.7	34.2	59.4	154.6
60	89.5	97.1	160.0	186.6	83.0	90.0	49.9	82.9	46.1	77.1	207.9
62	129.0	139.9	228.6	268.9	122.6	132.9	73.7	118.6	68.0	110.0	306.9
64	227.8	247.1	400.0	474.9	221.4	240.1	133.2	207.8	122.8	192.2	554.4
66	919.6	997.5	1600.0	1917.1	913.2	990.5	549.4	832.2	506.6	767.8	2287.0

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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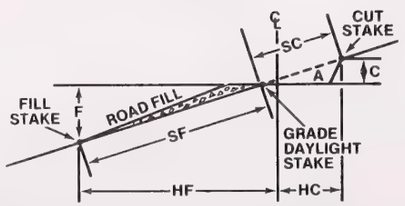
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

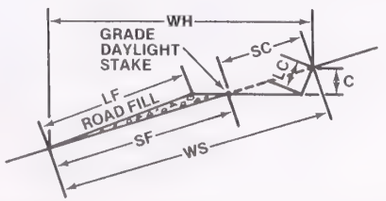
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 17 FEET

CUT SLOPE = VERTICAL

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.2	9.2	18.4	18.5	1.7	.9	.9	8.5	.9	9.9	4.2
12	9.5	9.3	18.7	18.8	2.0	1.1	1.1	8.5	1.1	10.2	5.2
14	9.8	9.4	19.0	19.2	2.4	1.3	1.3	8.5	1.4	10.5	6.1
16	10.1	9.5	19.4	19.6	2.9	1.5	1.5	8.5	1.6	10.9	7.1
18	10.4	9.7	19.8	20.1	3.3	1.7	1.7	8.5	1.8	11.3	8.1
20	10.8	9.8	20.2	20.6	3.8	1.9	1.9	8.5	2.1	11.7	9.2
22	11.2	9.9	20.6	21.1	4.3	2.1	2.1	8.5	2.4	12.1	10.3
24	11.6	10.1	21.1	21.7	4.9	2.3	2.3	8.5	2.7	12.6	11.5
26	12.1	10.2	21.6	22.3	5.5	2.6	2.6	8.5	3.0	13.1	12.7
28	12.6	10.4	22.1	22.9	6.1	2.8	2.8	8.5	3.4	13.6	14.0
30	13.1	10.5	22.6	23.6	6.8	3.0	3.0	8.5	3.8	14.1	15.3
32	13.7	10.7	23.3	24.4	7.5	3.3	3.3	8.5	4.2	14.8	16.7
34	14.4	10.9	23.9	25.3	8.3	3.5	3.5	8.5	4.6	15.4	18.1
36	15.1	11.1	24.7	26.2	9.2	3.8	3.8	8.5	5.1	16.2	19.7
38	15.9	11.3	25.5	27.3	10.2	4.0	4.0	8.5	5.7	17.0	21.3
40	16.9	11.6	26.4	28.4	11.3	4.3	4.3	8.5	6.3	17.9	23.1
42	17.9	11.8	27.4	29.7	12.5	4.6	4.6	8.5	6.9	18.9	24.9
44	19.1	12.1	28.5	31.2	13.9	4.9	4.9	8.5	7.7	20.0	26.9
46	20.5	12.4	29.8	32.8	15.4	5.2	5.2	8.5	8.6	21.3	29.0
48	22.1	12.7	31.3	34.8	17.2	5.5	5.5	8.5	9.6	22.8	31.3
50	24.0	13.0	33.1	37.0	19.3	5.8	5.8	8.5	10.7	24.6	33.8
52	26.3	13.4	35.2	39.7	21.9	6.2	6.2	8.5	12.1	26.7	36.6
54	29.1	13.8	37.8	42.9	25.0	6.5	6.5	8.5	13.9	29.3	39.7
56	32.8	14.2	41.0	47.0	28.9	7.0	7.0	8.5	16.0	32.5	43.2
58	37.7	14.7	45.4	52.5	34.1	7.4	7.4	8.5	18.9	36.9	47.2
60	44.8	15.3	51.5	60.1	41.5	7.9	7.9	8.5	23.0	43.0	52.0
62	56.0	16.1	61.3	72.1	53.2	8.5	8.5	8.5	29.5	52.8	57.9
64	78.6	17.0	80.5	95.6	76.3	9.2	9.2	8.5	42.3	72.0	65.9
66	171.9	18.6	159.1	190.6	170.7	10.3	10.3	8.5	94.7	150.6	79.9

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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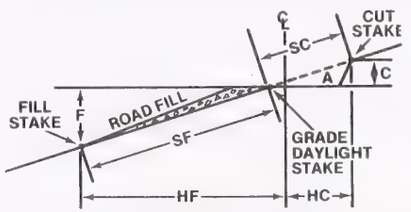
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
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C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

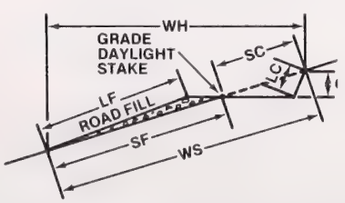
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 17 FEET

CUT SLOPE = .10 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.3	9.3	18.5	18.6	1.7	.9	.9	8.6	.9	9.9	4.2
12	9.5	9.4	18.8	19.0	2.0	1.1	1.1	8.6	1.1	10.2	5.2
14	9.8	9.5	19.2	19.4	2.5	1.3	1.3	8.6	1.4	10.5	6.2
16	10.1	9.7	19.6	19.8	2.9	1.5	1.5	8.7	1.6	10.9	7.2
18	10.5	9.8	20.0	20.3	3.3	1.7	1.7	8.7	1.9	11.3	8.2
20	10.8	9.9	20.4	20.8	3.8	2.0	1.9	8.7	2.1	11.7	9.3
22	11.2	10.1	20.8	21.3	4.4	2.2	2.2	8.7	2.4	12.1	10.5
24	11.7	10.3	21.3	21.9	4.9	2.4	2.4	8.7	2.7	12.6	11.6
26	12.1	10.4	21.8	22.6	5.5	2.6	2.6	8.8	3.1	13.1	12.9
28	12.7	10.6	22.4	23.3	6.2	2.9	2.9	8.8	3.4	13.6	14.2
30	13.2	10.8	23.0	24.0	6.8	3.1	3.1	8.8	3.8	14.2	15.6
32	13.8	11.0	23.7	24.8	7.6	3.4	3.4	8.8	4.2	14.8	17.0
34	14.5	11.2	24.4	25.7	8.4	3.6	3.6	8.9	4.7	15.5	18.5
36	15.3	11.5	25.2	26.7	9.3	3.9	3.9	8.9	5.2	16.3	20.1
38	16.1	11.7	26.0	27.8	10.3	4.2	4.2	8.9	5.7	17.1	21.8
40	17.1	12.0	27.0	29.0	11.4	4.5	4.4	8.9	6.3	18.0	23.7
42	18.2	12.2	28.0	30.4	12.7	4.8	4.7	9.0	7.0	19.0	25.6
44	19.4	12.5	29.2	31.9	14.1	5.1	5.0	9.0	7.8	20.2	27.7
46	20.8	12.9	30.6	33.7	15.7	5.4	5.4	9.0	8.7	21.5	29.9
48	22.4	13.2	32.1	35.7	17.5	5.7	5.7	9.1	9.7	23.1	32.4
50	24.4	13.6	34.0	38.0	19.7	6.1	6.1	9.1	10.9	24.9	35.1
52	26.8	14.0	36.2	40.8	22.3	6.5	6.5	9.1	12.4	27.0	38.0
54	29.7	14.5	38.9	44.2	25.5	6.9	6.9	9.2	14.1	29.7	41.3
56	33.5	15.0	42.3	48.5	29.5	7.3	7.3	9.2	16.4	33.1	45.0
58	38.6	15.5	46.8	54.1	34.9	7.8	7.8	9.3	19.3	37.5	49.4
60	45.8	16.2	53.2	62.0	42.5	8.4	8.3	9.3	23.6	43.9	54.5
62	57.5	17.0	63.3	74.5	54.6	9.0	9.0	9.4	30.3	53.9	60.9
64	80.8	18.1	83.3	98.9	78.5	9.8	9.8	9.5	43.5	73.8	69.7
66	177.4	19.9	164.7	197.3	176.2	11.0	11.0	9.6	97.7	155.1	85.1

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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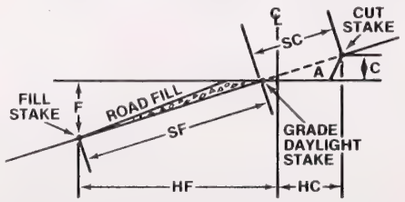
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

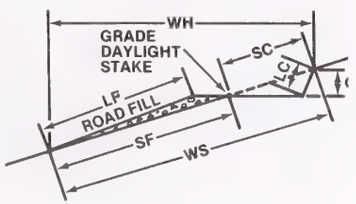
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 17 FEET

CUT SLOPE = .25 TO 1

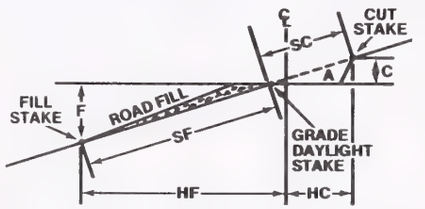
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.3	9.4	18.6	18.7	1.7	1.0	.9	8.7	.9	9.9	4.3
12	9.6	9.6	19.0	19.1	2.1	1.2	1.1	8.8	1.1	10.2	5.2
14	9.9	9.7	19.4	19.6	2.5	1.4	1.3	8.8	1.4	10.6	6.2
16	10.2	9.9	19.8	20.1	2.9	1.6	1.6	8.9	1.6	10.9	7.3
18	10.6	10.0	20.2	20.6	3.4	1.8	1.8	8.9	1.9	11.3	8.3
20	10.9	10.2	20.7	21.1	3.9	2.1	2.0	9.0	2.1	11.7	9.5
22	11.4	10.4	21.2	21.7	4.4	2.3	2.2	9.1	2.4	12.2	10.7
24	11.8	10.6	21.7	22.4	5.0	2.5	2.5	9.1	2.8	12.6	11.9
26	12.3	10.8	22.3	23.1	5.6	2.8	2.7	9.2	3.1	13.1	13.2
28	12.8	11.0	22.9	23.8	6.2	3.1	3.0	9.2	3.5	13.7	14.6
30	13.4	11.2	23.6	24.6	6.9	3.3	3.2	9.3	3.9	14.3	16.0
32	14.1	11.5	24.3	25.5	7.7	3.6	3.5	9.4	4.3	14.9	17.5
34	14.8	11.7	25.1	26.5	8.6	3.9	3.8	9.4	4.8	15.6	19.1
36	15.6	12.0	25.9	27.5	9.5	4.2	4.1	9.5	5.3	16.4	20.9
38	16.4	12.3	26.8	28.7	10.5	4.5	4.4	9.6	5.8	17.3	22.7
40	17.4	12.6	27.9	30.0	11.7	4.8	4.7	9.7	6.5	18.2	24.6
42	18.5	12.9	29.0	31.5	12.9	5.2	5.0	9.8	7.2	19.3	26.7
44	19.8	13.3	30.3	33.1	14.4	5.5	5.4	9.8	8.0	20.5	29.0
46	21.3	13.7	31.8	35.0	16.1	5.9	5.7	9.9	8.9	21.9	31.4
48	23.0	14.1	33.5	37.1	18.0	6.3	6.1	10.0	10.0	23.5	34.1
50	25.1	14.6	35.5	39.6	20.2	6.7	6.5	10.1	11.2	25.3	37.1
52	27.6	15.0	37.8	42.6	22.9	7.2	6.9	10.2	12.7	27.6	40.3
54	30.7	15.6	40.7	46.3	26.3	7.6	7.4	10.4	14.6	30.4	44.0
56	34.6	16.2	44.4	50.9	30.5	8.2	7.9	10.5	16.9	33.9	48.2
58	40.0	16.9	49.2	56.9	36.2	8.7	8.5	10.6	20.1	38.6	53.0
60	47.6	17.7	56.0	65.4	44.2	9.4	9.1	10.8	24.5	45.3	58.9
62	59.9	18.7	66.8	78.6	56.9	10.2	9.9	11.0	31.6	55.9	66.2
64	84.5	20.0	88.0	104.5	82.1	11.1	10.8	11.2	45.6	76.8	76.3
66	186.7	22.2	174.3	208.8	185.4	12.6	12.2	11.6	102.8	162.7	94.2

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

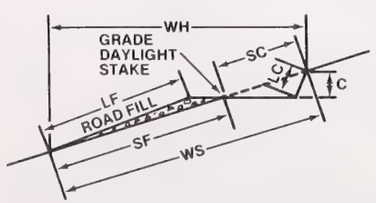
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 17 FEET

CUT SLOPE = .50 TO 1

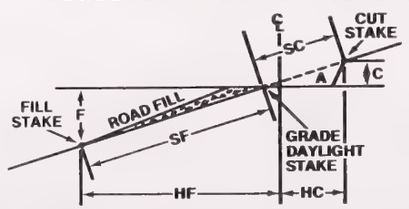
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.4	9.6	18.9	19.0	1.7	1.1	1.0	9.0	.9	9.9	4.3
12	9.7	9.8	19.3	19.4	2.1	1.3	1.2	9.1	1.2	10.2	5.3
14	10.0	10.0	19.8	20.0	2.5	1.5	1.4	9.2	1.4	10.6	6.4
16	10.3	10.2	20.3	20.5	2.9	1.8	1.6	9.3	1.6	10.9	7.4
18	10.7	10.4	20.8	21.1	3.4	2.1	1.8	9.4	1.9	11.3	8.6
20	11.1	10.6	21.3	21.7	3.9	2.3	2.1	9.5	2.2	11.8	9.8
22	11.5	10.9	21.9	22.4	4.5	2.6	2.3	9.7	2.5	12.2	11.0
24	12.0	11.1	22.5	23.1	5.1	2.9	2.6	9.8	2.8	12.7	12.4
26	12.5	11.4	23.2	23.9	5.7	3.2	2.9	9.9	3.2	13.2	13.8
28	13.1	11.7	23.9	24.8	6.4	3.5	3.1	10.1	3.5	13.8	15.2
30	13.7	12.0	24.6	25.7	7.1	3.9	3.4	10.2	3.9	14.4	16.8
32	14.4	12.3	25.5	26.7	7.9	4.2	3.8	10.4	4.4	15.1	18.5
34	15.2	12.7	26.4	27.9	8.8	4.6	4.1	10.5	4.9	15.8	20.3
36	16.0	13.0	27.4	29.1	9.8	4.9	4.4	10.7	5.4	16.7	22.2
38	17.0	13.4	28.4	30.4	10.9	5.3	4.8	10.9	6.0	17.6	24.3
40	18.1	13.9	29.6	31.9	12.1	5.8	5.1	11.1	6.7	18.6	26.5
42	19.3	14.3	31.0	33.6	13.5	6.2	5.5	11.3	7.5	19.7	28.9
44	20.7	14.8	32.5	35.5	15.0	6.7	6.0	11.5	8.3	21.0	31.5
46	22.3	15.3	34.2	37.6	16.8	7.2	6.4	11.7	9.3	22.5	34.4
48	24.2	15.9	36.1	40.1	18.9	7.7	6.9	11.9	10.5	24.2	37.5
50	26.4	16.5	38.4	42.9	21.3	8.3	7.4	12.2	11.8	26.2	41.0
52	29.1	17.2	41.1	46.4	24.2	8.9	7.9	12.5	13.4	28.7	45.0
54	32.5	18.0	44.5	50.5	27.9	9.6	8.6	12.8	15.5	31.7	49.4
56	36.9	18.9	48.6	55.8	32.5	10.3	9.2	13.1	18.0	35.5	54.6
58	42.8	19.8	54.2	62.6	38.7	11.1	10.0	13.5	21.5	40.7	60.7
60	51.2	21.0	61.9	72.2	47.5	12.1	10.8	13.9	26.4	48.0	68.1
62	64.9	22.4	74.2	87.3	61.6	13.2	11.8	14.4	34.2	59.8	77.6
64	92.2	24.3	98.1	116.5	89.6	14.6	13.1	15.0	49.7	83.1	90.8
66	206.2	27.3	194.9	233.5	204.8	16.8	15.1	16.0	113.6	178.9	115.0

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

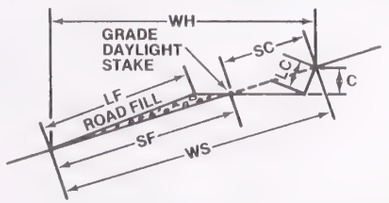
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 17 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.4	9.8	19.1	19.2	1.7	1.2	1.0	9.2	.9	9.9	4.4
12	9.7	10.0	19.6	19.8	2.1	1.5	1.2	9.4	1.2	10.2	5.4
14	10.1	10.3	20.2	20.4	2.5	1.8	1.4	9.6	1.4	10.6	6.5
16	10.5	10.5	20.7	21.0	3.0	2.1	1.7	9.7	1.7	11.0	7.6
18	10.9	10.8	21.3	21.7	3.5	2.4	1.9	9.9	1.9	11.4	8.8
20	11.3	11.1	22.0	22.4	4.0	2.7	2.2	10.1	2.2	11.8	10.1
22	11.8	11.4	22.6	23.2	4.6	3.1	2.5	10.3	2.5	12.3	11.4
24	12.3	11.8	23.3	24.0	5.2	3.4	2.7	10.6	2.9	12.8	12.8
26	12.8	12.1	24.1	24.9	5.8	3.8	3.0	10.8	3.2	13.3	14.4
28	13.4	12.5	25.0	25.9	6.5	4.2	3.4	11.0	3.6	13.9	16.0
30	14.1	12.9	25.9	27.0	7.3	4.6	3.7	11.3	4.1	14.6	17.7
32	14.9	13.3	26.8	28.2	8.2	5.1	4.1	11.5	4.5	15.3	19.6
34	15.7	13.8	27.9	29.5	9.1	5.5	4.4	11.8	5.0	16.1	21.6
36	16.6	14.3	29.1	30.9	10.1	6.1	4.8	12.1	5.6	16.9	23.8
38	17.6	14.8	30.3	32.5	11.3	6.6	5.3	12.5	6.3	17.9	26.1
40	18.8	15.4	31.8	34.2	12.6	7.2	5.7	12.8	7.0	19.0	28.7
42	20.1	16.0	33.4	36.2	14.1	7.8	6.2	13.2	7.8	20.2	31.5
44	21.7	16.7	35.1	38.4	15.7	8.4	6.7	13.6	8.7	21.6	34.6
46	23.4	17.5	37.2	40.9	17.6	9.1	7.3	14.0	9.8	23.2	38.0
48	25.5	18.3	39.5	43.8	19.9	9.9	7.9	14.4	11.0	25.1	41.8
50	28.0	19.2	42.2	47.2	22.6	10.7	8.6	14.9	12.5	27.3	46.1
52	31.0	20.2	45.5	51.3	25.8	11.7	9.3	15.5	14.3	30.0	51.0
54	34.8	21.3	49.4	56.2	29.8	12.7	10.1	16.1	16.5	33.3	56.7
56	39.7	22.6	54.4	62.4	35.0	13.8	11.1	16.8	19.4	37.6	63.3
58	46.4	24.1	61.0	70.5	41.9	15.1	12.1	17.6	23.3	43.4	71.3
60	55.9	25.9	70.2	81.8	51.9	16.6	13.3	18.5	28.8	51.7	81.2
62	71.5	28.0	84.6	99.5	67.9	18.5	14.8	19.6	37.7	65.0	94.2
64	102.8	30.9	112.6	133.7	99.9	20.8	16.7	21.0	55.4	91.6	112.8
66	233.9	35.7	225.0	269.6	232.3	24.6	19.7	23.2	128.8	201.8	148.0

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
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LF = LENGTH OF FILL SLOPE
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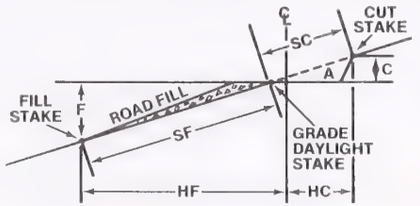
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

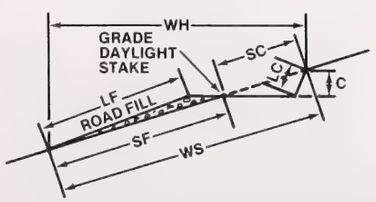
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 17 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.5	10.0	19.4	19.5	1.7	1.4	1.0	9.5	.9	9.9	4.5
12	9.8	10.3	20.0	20.1	2.1	1.7	1.2	9.7	1.2	10.3	5.5
14	10.2	10.6	20.6	20.8	2.5	2.1	1.5	10.0	1.4	10.6	6.6
16	10.6	10.9	21.2	21.5	3.0	2.4	1.7	10.2	1.7	11.0	7.8
18	11.0	11.3	21.9	22.3	3.5	2.8	2.0	10.5	2.0	11.4	9.1
20	11.5	11.6	22.7	23.1	4.1	3.2	2.3	10.8	2.2	11.9	10.4
22	12.0	12.0	23.4	24.0	4.6	3.7	2.6	11.1	2.6	12.4	11.9
24	12.5	12.5	24.3	25.0	5.3	4.1	2.9	11.4	2.9	12.9	13.4
26	13.1	12.9	25.2	26.0	6.0	4.6	3.3	11.8	3.3	13.5	15.0
28	13.8	13.4	26.2	27.2	6.7	5.1	3.6	12.1	3.7	14.1	16.8
30	14.5	14.0	27.3	28.5	7.5	5.7	4.0	12.5	4.2	14.8	18.8
32	15.3	14.5	28.4	29.9	8.4	6.3	4.4	12.9	4.7	15.5	20.8
34	16.2	15.2	29.7	31.4	9.4	6.9	4.9	13.4	5.2	16.3	23.1
36	17.2	15.8	31.1	33.1	10.5	7.6	5.4	13.9	5.8	17.3	25.6
38	18.4	16.6	32.7	35.0	11.8	8.3	5.9	14.4	6.5	18.3	28.3
40	19.7	17.4	34.4	37.1	13.2	9.1	6.5	15.0	7.3	19.5	31.4
42	21.1	18.3	36.4	39.4	14.8	10.0	7.1	15.6	8.2	20.8	34.7
44	22.8	19.3	38.6	42.1	16.6	11.0	7.8	16.3	9.2	22.3	38.4
46	24.8	20.4	41.1	45.2	18.7	12.1	8.5	17.0	10.4	24.1	42.7
48	27.2	21.6	44.0	48.8	21.2	13.2	9.4	17.9	11.8	26.1	47.5
50	30.0	23.0	47.4	53.0	24.2	14.6	10.3	18.8	13.4	28.6	53.0
52	33.5	24.6	51.5	58.0	27.8	16.0	11.3	19.8	15.4	31.7	59.3
54	37.8	26.4	56.5	64.2	32.4	17.7	12.5	21.0	18.0	35.5	66.9
56	43.5	28.5	62.8	72.0	38.3	19.7	13.9	22.4	21.3	40.4	76.0
58	51.3	30.9	71.1	82.2	46.4	21.9	15.5	24.0	25.7	47.1	87.2
60	62.6	33.9	82.7	96.5	58.0	24.7	17.5	26.0	32.2	56.8	101.5
62	81.0	37.7	100.9	118.7	77.0	28.1	19.9	28.4	42.7	72.5	121.0
64	118.6	42.9	136.0	161.5	115.3	32.7	23.1	31.6	63.9	104.4	150.3
66	278.1	51.7	275.3	329.8	276.2	40.3	28.5	37.0	153.2	238.3	209.1

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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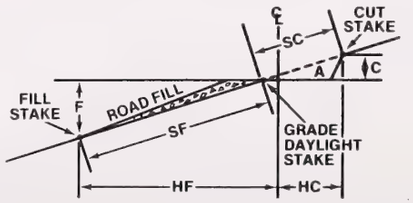
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

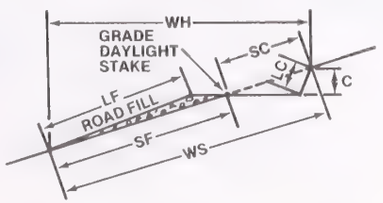
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 17 FEET

CUT SLOPE = 1.5 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.6	10.5	20.0	20.1	1.7	1.9	1.0	10.1	1.0	9.9	4.6
12	10.0	10.9	20.7	20.9	2.2	2.3	1.3	10.4	1.2	10.3	5.7
14	10.4	11.3	21.5	21.7	2.6	2.8	1.6	10.9	1.4	10.7	6.9
16	10.9	11.8	22.4	22.7	3.1	3.4	1.9	11.3	1.7	11.1	8.2
18	11.4	12.3	23.3	23.7	3.6	3.9	2.2	11.8	2.0	11.5	9.6
20	11.9	12.9	24.3	24.8	4.2	4.6	2.5	12.3	2.3	12.0	11.2
22	12.5	13.5	25.4	26.0	4.8	5.2	2.9	12.9	2.7	12.5	12.8
24	13.1	14.2	26.6	27.3	5.5	6.0	3.3	13.5	3.1	13.1	14.7
26	13.8	15.0	27.9	28.8	6.3	6.8	3.8	14.2	3.5	13.7	16.7
28	14.6	15.8	29.3	30.4	7.1	7.7	4.3	14.9	3.9	14.4	18.9
30	15.5	16.8	30.9	32.3	8.0	8.7	4.8	15.7	4.4	15.2	21.3
32	16.5	17.9	32.7	34.3	9.0	9.8	5.4	16.7	5.0	16.0	24.1
34	17.6	19.1	34.7	36.6	10.2	11.1	6.1	17.7	5.7	17.0	27.1
36	18.8	20.4	37.0	39.3	11.5	12.5	6.9	18.9	6.4	18.1	30.6
38	20.3	22.0	39.5	42.3	13.0	14.1	7.8	20.2	7.2	19.3	34.6
40	22.0	23.8	42.5	45.8	14.7	15.9	8.8	21.8	8.2	20.7	39.1
42	23.9	25.9	45.9	49.8	16.7	18.1	10.0	23.6	9.3	22.4	44.4
44	26.2	28.4	50.0	54.6	19.0	20.6	11.4	25.7	10.6	24.3	50.6
46	29.0	31.4	54.8	60.4	21.8	23.7	13.1	28.2	12.1	26.7	58.0
48	32.3	35.0	60.7	67.3	25.2	27.3	15.2	31.2	14.0	29.5	67.1
50	36.5	39.6	68.0	76.0	29.4	31.9	17.7	35.0	16.3	33.0	78.2
52	41.8	45.3	77.3	87.1	34.7	37.7	20.9	39.9	19.3	37.4	92.5
54	48.8	52.9	89.5	101.7	41.8	45.3	25.1	46.2	23.2	43.3	111.2
56	58.4	63.4	106.2	121.8	51.5	55.8	31.0	54.9	28.5	51.3	136.9
58	72.5	78.7	130.8	151.2	65.6	71.1	39.5	67.7	36.4	63.1	174.5
60	95.1	103.2	170.0	198.3	88.2	95.7	53.1	88.1	48.9	81.9	234.7
62	137.1	148.7	242.9	285.7	130.2	141.2	78.3	126.0	72.2	116.8	346.5
64	242.0	262.5	425.0	504.6	235.2	255.1	141.5	220.8	130.5	204.2	625.9
66	977.1	1059.8	1700.0	2036.9	970.3	1052.4	583.8	884.2	538.2	815.8	2581.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
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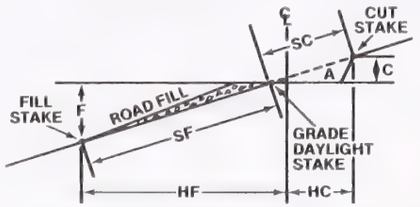
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

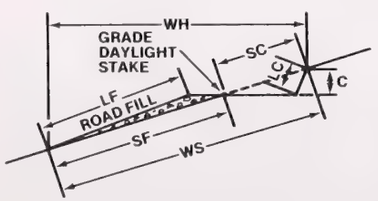
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 18 FEET

CUT SLOPE = VERTICAL

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.8	9.8	19.5	19.6	1.8	1.0	1.0	9.0	1.0	10.5	4.7
12	10.1	9.9	19.8	19.9	2.2	1.2	1.2	9.0	1.2	10.8	5.8
14	10.4	10.0	20.2	20.4	2.6	1.4	1.4	9.0	1.4	11.2	6.9
16	10.7	10.1	20.5	20.8	3.0	1.6	1.6	9.0	1.7	11.5	8.0
18	11.0	10.2	20.9	21.3	3.5	1.8	1.8	9.0	2.0	11.9	9.1
20	11.4	10.4	21.4	21.8	4.0	2.0	2.0	9.0	2.2	12.4	10.3
22	11.8	10.5	21.8	22.3	4.6	2.3	2.3	9.0	2.5	12.8	11.6
24	12.3	10.7	22.3	22.9	5.2	2.5	2.5	9.0	2.9	13.3	12.9
26	12.8	10.8	22.8	23.6	5.8	2.7	2.7	9.0	3.2	13.8	14.2
28	13.3	11.0	23.4	24.3	6.5	3.0	3.0	9.0	3.6	14.4	15.7
30	13.9	11.2	24.0	25.0	7.2	3.2	3.2	9.0	4.0	15.0	17.1
32	14.5	11.4	24.6	25.9	8.0	3.5	3.5	9.0	4.4	15.6	18.7
34	15.2	11.6	25.3	26.8	8.8	3.7	3.7	9.0	4.9	16.3	20.3
36	16.0	11.8	26.1	27.8	9.8	4.0	4.0	9.0	5.4	17.1	22.1
38	16.9	12.0	27.0	28.9	10.8	4.3	4.3	9.0	6.0	18.0	23.9
40	17.9	12.2	27.9	30.1	12.0	4.5	4.5	9.0	6.6	18.9	25.9
42	19.0	12.5	29.0	31.5	13.2	4.8	4.8	9.0	7.3	20.0	27.9
44	20.2	12.8	30.2	33.0	14.7	5.2	5.2	9.0	8.1	21.2	30.2
46	21.7	13.1	31.6	34.8	16.3	5.5	5.5	9.0	9.1	22.6	32.5
48	23.4	13.4	33.2	36.8	18.2	5.8	5.8	9.0	10.1	24.2	35.1
50	25.4	13.8	35.0	39.2	20.5	6.2	6.2	9.0	11.4	26.0	37.9
52	27.8	14.2	37.3	42.0	23.2	6.5	6.5	9.0	12.8	28.3	41.1
54	30.9	14.6	40.0	45.5	26.4	6.9	6.9	9.0	14.7	31.0	44.5
56	34.7	15.1	43.5	49.8	30.6	7.4	7.4	9.0	17.0	34.5	48.4
58	39.9	15.6	48.1	55.6	36.1	7.8	7.8	9.0	20.0	39.1	52.9
60	47.4	16.3	54.6	63.6	44.0	8.4	8.4	9.0	24.4	45.6	58.3
62	59.3	17.0	64.9	76.4	56.4	9.0	9.0	9.0	31.3	55.9	64.9
64	83.2	18.0	85.3	101.2	80.8	9.7	9.7	9.0	44.8	76.3	73.9
66	182.1	19.7	168.4	201.8	180.8	10.9	10.9	9.0	100.3	159.4	89.6

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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WS = TOT. WIDTH DISTURB. SLOPE
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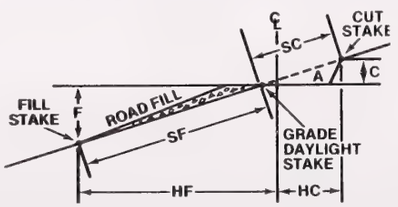
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

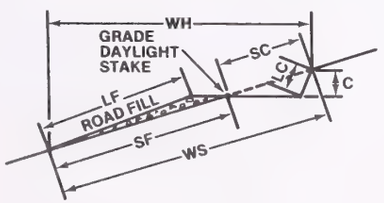
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 18 FEET

CUT SLOPE = .10 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.8	9.9	19.6	19.7	1.8	1.0	1.0	9.1	1.0	10.5	4.8
12	10.1	10.0	19.9	20.1	2.2	1.2	1.2	9.1	1.2	10.8	5.8
14	10.4	10.1	20.3	20.5	2.6	1.4	1.4	9.1	1.4	11.2	6.9
16	10.7	10.2	20.7	21.0	3.1	1.6	1.6	9.2	1.7	11.5	8.0
18	11.1	10.4	21.1	21.5	3.5	1.8	1.8	9.2	2.0	11.9	9.2
20	11.5	10.5	21.6	22.0	4.1	2.1	2.1	9.2	2.3	12.4	10.4
22	11.9	10.7	22.1	22.6	4.6	2.3	2.3	9.2	2.6	12.8	11.7
24	12.4	10.9	22.6	23.2	5.2	2.5	2.5	9.3	2.9	13.3	13.1
26	12.9	11.0	23.1	23.9	5.8	2.8	2.8	9.3	3.2	13.9	14.5
28	13.4	11.2	23.7	24.6	6.5	3.0	3.0	9.3	3.6	14.4	15.9
30	14.0	11.4	24.4	25.4	7.3	3.3	3.3	9.3	4.0	15.0	17.5
32	14.7	11.7	25.1	26.3	8.1	3.6	3.6	9.4	4.5	15.7	19.1
34	15.4	11.9	25.8	27.3	8.9	3.8	3.8	9.4	5.0	16.4	20.8
36	16.2	12.1	26.6	28.3	9.9	4.1	4.1	9.4	5.5	17.2	22.6
38	17.1	12.4	27.5	29.5	10.9	4.4	4.4	9.4	6.1	18.1	24.5
40	18.1	12.7	28.5	30.7	12.1	4.7	4.7	9.5	6.7	19.1	26.5
42	19.2	13.0	29.7	32.2	13.4	5.0	5.0	9.5	7.4	20.2	28.7
44	20.5	13.3	30.9	33.8	14.9	5.4	5.3	9.5	8.3	21.4	31.0
46	22.0	13.6	32.4	35.6	16.6	5.7	5.7	9.6	9.2	22.8	33.6
48	23.8	14.0	34.0	37.8	18.5	6.1	6.1	9.6	10.3	24.4	36.3
50	25.8	14.4	36.0	40.2	20.8	6.5	6.4	9.6	11.6	26.3	39.3
52	28.4	14.8	38.3	43.2	23.6	6.9	6.8	9.7	13.1	28.6	42.6
54	31.5	15.3	41.2	46.8	27.0	7.3	7.3	9.7	15.0	31.4	46.3
56	35.5	15.8	44.8	51.3	31.2	7.8	7.7	9.8	17.3	35.0	50.5
58	40.8	16.5	49.6	57.3	36.9	8.3	8.3	9.8	20.5	39.7	55.3
60	48.5	17.2	56.3	65.7	45.0	8.9	8.8	9.9	25.0	46.5	61.1
62	60.9	18.0	67.1	78.9	57.8	9.6	9.5	10.0	32.1	57.1	68.3
64	85.5	19.2	88.2	104.7	83.1	10.4	10.3	10.0	46.1	78.2	78.1
66	187.8	21.1	174.4	208.9	186.5	11.7	11.6	10.2	103.5	164.2	95.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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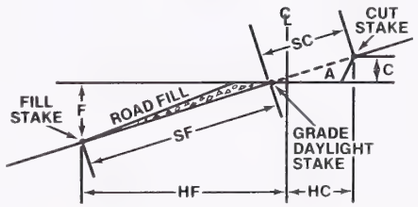
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

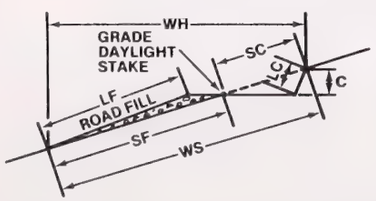
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 18 FEET

CUT SLOPE = .25 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.8	10.0	19.7	19.8	1.8	1.0	1.0	9.2	1.0	10.5	4.8
12	10.1	10.1	20.1	20.3	2.2	1.2	1.2	9.3	1.2	10.8	5.9
14	10.5	10.3	20.5	20.7	2.6	1.5	1.4	9.4	1.5	11.2	7.0
16	10.8	10.4	21.0	21.2	3.1	1.7	1.6	9.4	1.7	11.6	8.1
18	11.2	10.6	21.4	21.8	3.6	1.9	1.9	9.5	2.0	12.0	9.4
20	11.6	10.8	21.9	22.4	4.1	2.2	2.1	9.5	2.3	12.4	10.6
22	12.0	11.0	22.5	23.0	4.7	2.4	2.4	9.6	2.6	12.9	12.0
24	12.5	11.2	23.0	23.7	5.3	2.7	2.6	9.7	2.9	13.4	13.3
26	13.0	11.4	23.6	24.4	5.9	3.0	2.9	9.7	3.3	13.9	14.8
28	13.6	11.6	24.3	25.2	6.6	3.2	3.1	9.8	3.7	14.5	16.3
30	14.2	11.9	25.0	26.1	7.4	3.5	3.4	9.9	4.1	15.1	17.9
32	14.9	12.1	25.7	27.0	8.2	3.8	3.7	9.9	4.5	15.8	19.7
34	15.6	12.4	26.5	28.0	9.1	4.1	4.0	10.0	5.0	16.5	21.5
36	16.5	12.7	27.4	29.2	10.1	4.4	4.3	10.1	5.6	17.4	23.4
38	17.4	13.0	28.4	30.4	11.1	4.8	4.6	10.2	6.2	18.3	25.4
40	18.4	13.3	29.5	31.8	12.4	5.1	5.0	10.2	6.9	19.3	27.6
42	19.6	13.7	30.7	33.3	13.7	5.5	5.3	10.3	7.6	20.4	30.0
44	21.0	14.1	32.1	35.1	15.2	5.8	5.7	10.4	8.5	21.7	32.5
46	22.6	14.5	33.7	37.0	17.0	6.2	6.1	10.5	9.4	23.1	35.2
48	24.4	14.9	35.5	39.3	19.0	6.7	6.5	10.6	10.6	24.8	38.2
50	26.6	15.4	37.5	42.0	21.4	7.1	6.9	10.7	11.9	26.8	41.5
52	29.2	15.9	40.1	45.1	24.3	7.6	7.4	10.8	13.5	29.2	45.2
54	32.5	16.5	43.1	49.0	27.8	8.1	7.8	11.0	15.4	32.2	49.3
56	36.7	17.2	47.0	53.8	32.3	8.6	8.4	11.1	17.9	35.9	54.0
58	42.3	17.9	52.1	60.2	38.3	9.3	9.0	11.2	21.2	40.9	59.5
60	50.4	18.8	59.3	69.2	46.8	10.0	9.7	11.4	25.9	47.9	66.0
62	63.4	19.8	70.8	83.3	60.3	10.8	10.4	11.6	33.4	59.2	74.2
64	89.5	21.2	93.2	110.7	87.0	11.8	11.4	11.9	48.2	81.4	85.5
66	197.7	23.5	184.5	221.1	196.3	13.3	12.9	12.2	108.9	172.3	105.7

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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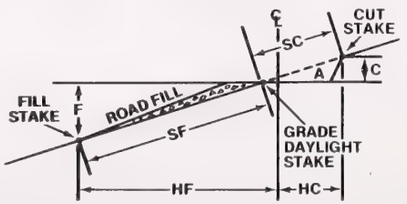
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

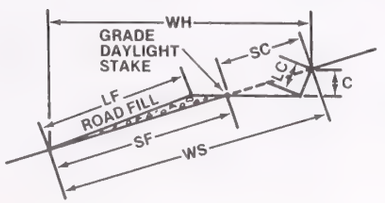
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 18 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	9.9	10.2	20.0	20.1	1.8	1.1	1.0	9.5	1.0	10.5	4.9
12	10.2	10.4	20.4	20.6	2.2	1.4	1.2	9.6	1.2	10.8	6.0
14	10.6	10.6	20.9	21.1	2.6	1.6	1.5	9.7	1.5	11.2	7.1
16	10.9	10.8	21.4	21.7	3.1	1.9	1.7	9.9	1.7	11.6	8.3
18	11.3	11.0	22.0	22.3	3.6	2.2	2.0	10.0	2.0	12.0	9.6
20	11.8	11.2	22.6	23.0	4.2	2.5	2.2	10.1	2.3	12.5	11.0
22	12.2	11.5	23.2	23.7	4.7	2.8	2.5	10.2	2.6	12.9	12.4
24	12.7	11.8	23.8	24.5	5.4	3.1	2.7	10.4	3.0	13.5	13.8
26	13.3	12.1	24.5	25.3	6.0	3.4	3.0	10.5	3.3	14.0	15.4
28	13.9	12.4	25.3	26.3	6.8	3.7	3.3	10.7	3.7	14.6	17.1
30	14.5	12.7	26.1	27.2	7.5	4.1	3.6	10.8	4.2	15.3	18.8
32	15.3	13.0	27.0	28.3	8.4	4.4	4.0	11.0	4.7	16.0	20.7
34	16.1	13.4	27.9	29.5	9.3	4.8	4.3	11.2	5.2	16.8	22.7
36	17.0	13.8	29.0	30.8	10.4	5.2	4.7	11.3	5.8	17.6	24.9
38	18.0	14.2	30.1	32.2	11.5	5.6	5.1	11.5	6.4	18.6	27.2
40	19.1	14.7	31.4	33.8	12.8	6.1	5.4	11.7	7.1	19.7	29.7
42	20.4	15.2	32.8	35.6	14.3	6.6	5.9	11.9	7.9	20.9	32.4
44	21.9	15.7	34.4	37.6	15.9	7.1	6.3	12.2	8.8	22.2	35.3
46	23.6	16.2	36.2	39.8	17.8	7.6	6.8	12.4	9.9	23.8	38.5
48	25.6	16.8	38.3	42.4	20.0	8.1	7.3	12.6	11.1	25.6	42.1
50	28.0	17.5	40.7	45.5	22.5	8.8	7.8	12.9	12.5	27.8	46.0
52	30.8	18.2	43.6	49.1	25.7	9.4	8.4	13.2	14.2	30.3	50.4
54	34.4	19.1	47.1	53.5	29.5	10.1	9.1	13.5	16.4	33.5	55.4
56	39.1	20.0	51.5	59.0	34.4	10.9	9.8	13.9	19.1	37.6	61.2
58	45.3	21.0	57.4	66.3	41.0	11.8	10.5	14.3	22.7	43.1	68.1
60	54.2	22.2	65.6	76.5	50.3	12.8	11.4	14.7	27.9	50.9	76.4
62	68.7	23.7	78.5	92.4	65.2	14.0	12.5	15.3	36.2	63.3	87.0
64	97.6	25.7	103.9	123.3	94.9	15.5	13.8	15.9	52.6	87.9	101.8
66	218.3	28.9	206.4	247.3	216.8	17.8	15.9	17.0	120.3	189.4	128.9

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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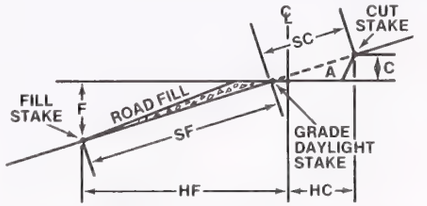
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

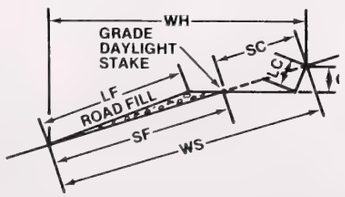
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 18 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.0	10.4	20.3	20.4	1.8	1.3	1.0	9.8	1.0	10.5	4.9
12	10.3	10.6	20.8	20.9	2.2	1.6	1.3	9.9	1.2	10.8	6.1
14	10.7	10.9	21.4	21.6	2.7	1.9	1.5	10.1	1.5	11.2	7.3
16	11.1	11.2	21.9	22.2	3.2	2.2	1.8	10.3	1.7	11.6	8.5
18	11.5	11.4	22.6	22.9	3.7	2.5	2.0	10.5	2.0	12.1	9.9
20	11.9	11.8	23.2	23.7	4.2	2.9	2.3	10.7	2.3	12.5	11.3
22	12.4	12.1	24.0	24.5	4.8	3.2	2.6	10.9	2.7	13.0	12.8
24	13.0	12.4	24.7	25.4	5.5	3.6	2.9	11.2	3.0	13.5	14.4
26	13.6	12.8	25.5	26.4	6.2	4.0	3.2	11.4	3.4	14.1	16.1
28	14.2	13.2	26.4	27.4	6.9	4.5	3.6	11.7	3.8	14.8	17.9
30	14.9	13.6	27.4	28.6	7.7	4.9	3.9	11.9	4.3	15.4	19.9
32	15.7	14.1	28.4	29.8	8.6	5.4	4.3	12.2	4.8	16.2	22.0
34	16.6	14.6	29.5	31.2	9.6	5.9	4.7	12.5	5.3	17.0	24.2
36	17.6	15.1	30.8	32.7	10.7	6.4	5.1	12.8	6.0	17.9	26.6
38	18.7	15.7	32.1	34.4	12.0	7.0	5.6	13.2	6.6	18.9	29.3
40	19.9	16.3	33.6	36.2	13.3	7.6	6.1	13.5	7.4	20.1	32.1
42	21.3	17.0	35.3	38.3	14.9	8.2	6.6	13.9	8.3	21.4	35.3
44	22.9	17.7	37.2	40.6	16.6	8.9	7.1	14.4	9.2	22.9	38.8
46	24.8	18.5	39.4	43.3	18.7	9.7	7.7	14.8	10.4	24.5	42.6
48	27.0	19.4	41.8	46.4	21.1	10.5	8.4	15.3	11.7	26.5	46.9
50	29.6	20.3	44.7	50.0	23.9	11.4	9.1	15.8	13.3	28.9	51.7
52	32.9	21.4	48.1	54.3	27.3	12.3	9.9	16.4	15.2	31.7	57.2
54	36.9	22.6	52.3	59.5	31.6	13.4	10.7	17.1	17.5	35.3	63.6
56	42.1	24.0	57.6	66.0	37.1	14.6	11.7	17.8	20.6	39.8	71.0
58	49.1	25.5	64.5	74.6	44.4	16.0	12.8	18.6	24.6	45.9	80.0
60	59.2	27.4	74.3	86.6	54.9	17.6	14.1	19.6	30.5	54.7	91.1
62	75.7	29.7	89.5	105.4	71.9	19.6	15.6	20.7	39.9	68.8	105.6
64	108.8	32.7	119.2	141.5	105.7	22.1	17.6	22.2	58.6	97.0	126.4
66	247.7	37.8	238.3	285.5	245.9	26.0	20.8	24.6	136.4	213.6	165.9

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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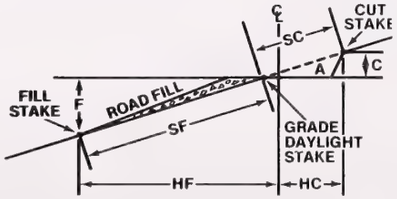
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

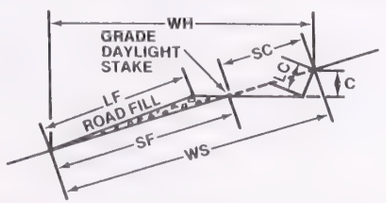
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 18 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.1	10.6	20.6	20.7	1.8	1.5	1.1	10.1	1.0	10.5	5.0
12	10.4	10.9	21.2	21.3	2.2	1.8	1.3	10.3	1.2	10.9	6.2
14	10.8	11.2	21.8	22.0	2.7	2.2	1.6	10.6	1.5	11.2	7.4
16	11.2	11.6	22.5	22.8	3.2	2.6	1.8	10.8	1.8	11.7	8.8
18	11.7	11.9	23.2	23.6	3.7	3.0	2.1	11.1	2.1	12.1	10.2
20	12.1	12.3	24.0	24.5	4.3	3.4	2.4	11.4	2.4	12.6	11.7
22	12.7	12.7	24.8	25.4	4.9	3.9	2.7	11.7	2.7	13.1	13.3
24	13.3	13.2	25.7	26.4	5.6	4.4	3.1	12.1	3.1	13.6	15.0
26	13.9	13.7	26.7	27.6	6.3	4.9	3.4	12.4	3.5	14.2	16.9
28	14.6	14.2	27.7	28.8	7.1	5.4	3.8	12.8	3.9	14.9	18.9
30	15.4	14.8	28.9	30.1	8.0	6.0	4.2	13.2	4.4	15.6	21.0
32	16.2	15.4	30.1	31.6	8.9	6.6	4.7	13.7	4.9	16.4	23.4
34	17.2	16.1	31.5	33.2	10.0	7.3	5.2	14.2	5.5	17.3	25.9
36	18.2	16.8	33.0	35.0	11.1	8.0	5.7	14.7	6.2	18.3	28.7
38	19.4	17.6	34.6	37.0	12.5	8.8	6.2	15.2	6.9	19.4	31.8
40	20.8	18.4	36.4	39.2	13.9	9.7	6.8	15.8	7.7	20.6	35.2
42	22.4	19.4	38.5	41.8	15.6	10.6	7.5	16.5	8.7	22.0	38.9
44	24.2	20.4	40.8	44.6	17.6	11.6	8.2	17.2	9.7	23.6	43.1
46	26.3	21.6	43.5	47.9	19.8	12.8	9.0	18.0	11.0	25.5	47.8
48	28.8	22.9	46.6	51.7	22.4	14.0	9.9	18.9	12.5	27.7	53.2
50	31.8	24.4	50.2	56.1	25.6	15.4	10.9	19.9	14.2	30.3	59.4
52	35.4	26.0	54.5	61.5	29.5	17.0	12.0	21.0	16.4	33.5	66.5
54	40.1	27.9	59.8	68.0	34.3	18.8	13.3	22.3	19.0	37.6	75.0
56	46.1	30.1	66.5	76.2	40.6	20.8	14.7	23.7	22.5	42.8	85.2
58	54.3	32.7	75.3	87.0	49.1	23.2	16.4	25.4	27.2	49.8	97.7
60	66.2	35.9	87.6	102.2	61.4	26.1	18.5	27.5	34.1	60.1	113.8
62	85.8	39.9	106.8	125.7	81.5	29.8	21.0	30.0	45.2	76.8	135.7
64	125.6	45.4	144.0	171.0	122.1	34.6	24.5	33.5	67.7	110.6	168.5
66	294.4	54.8	291.5	349.2	292.4	42.7	30.2	39.2	162.2	252.3	234.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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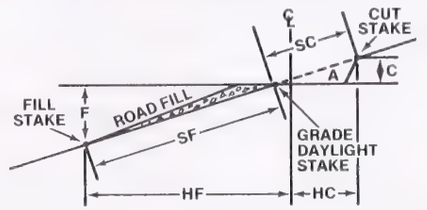
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

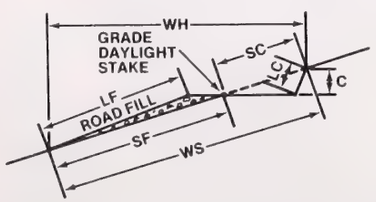
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 18 FEET

CUT SLOPE = 1.5 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.2	11.1	21.2	21.3	1.8	2.0	1.1	10.7	1.0	10.5	5.2
12	10.6	11.5	22.0	22.1	2.3	2.5	1.4	11.1	1.3	10.9	6.4
14	11.0	12.0	22.8	23.0	2.8	3.0	1.7	11.5	1.5	11.3	7.8
16	11.5	12.5	23.7	24.0	3.3	3.6	2.0	12.0	1.8	11.7	9.2
18	12.0	13.0	24.7	25.1	3.8	4.2	2.3	12.5	2.1	12.2	10.8
20	12.6	13.6	25.7	26.2	4.4	4.8	2.7	13.0	2.5	12.7	12.5
22	13.2	14.3	26.9	27.5	5.1	5.5	3.1	13.6	2.8	13.3	14.4
24	13.9	15.0	28.1	28.9	5.8	6.3	3.5	14.3	3.2	13.9	16.4
26	14.6	15.9	29.5	30.5	6.6	7.2	4.0	15.0	3.7	14.5	18.7
28	15.5	16.8	31.0	32.2	7.5	8.2	4.5	15.8	4.2	15.3	21.2
30	16.4	17.8	32.7	34.2	8.5	9.2	5.1	16.7	4.7	16.1	23.9
32	17.4	18.9	34.6	36.3	9.6	10.4	5.8	17.6	5.3	17.0	27.0
34	18.6	20.2	36.7	38.8	10.8	11.7	6.5	18.7	6.0	18.0	30.4
36	20.0	21.6	39.1	41.6	12.2	13.2	7.3	20.0	6.8	19.1	34.3
38	21.5	23.3	41.9	44.8	13.8	14.9	8.3	21.4	7.6	20.4	38.8
40	23.2	25.2	45.0	48.5	15.6	16.9	9.4	23.0	8.6	22.0	43.9
42	25.3	27.5	48.6	52.8	17.7	19.2	10.6	24.9	9.8	23.7	49.8
44	27.7	30.1	52.9	57.8	20.1	21.8	12.1	27.2	11.2	25.8	56.8
46	30.7	33.3	58.1	63.9	23.1	25.1	13.9	29.8	12.8	28.2	65.1
48	34.2	37.1	64.3	71.3	26.7	28.9	16.1	33.1	14.8	31.2	75.2
50	38.6	41.9	72.0	80.5	31.1	33.8	18.7	37.1	17.3	34.9	87.7
52	44.2	48.0	81.8	92.2	36.8	39.9	22.1	42.2	20.4	39.6	103.7
54	51.6	56.0	94.7	107.7	44.2	48.0	26.6	48.9	24.5	45.8	124.6
56	61.9	67.1	112.5	128.9	54.5	59.1	32.8	58.2	30.2	54.3	153.5
58	76.8	83.3	138.5	160.1	69.4	75.3	41.8	71.7	38.5	66.8	195.7
60	100.7	109.2	180.0	209.9	93.4	101.3	56.2	93.3	51.8	86.7	263.1
62	145.1	157.4	257.1	302.6	137.9	149.5	83.0	133.4	76.5	123.7	388.4
64	256.3	278.0	450.0	534.3	249.1	270.1	149.8	233.8	138.2	216.2	701.7
66	1034.6	1122.1	1800.0	2156.7	1027.4	1114.3	618.1	936.2	569.9	863.8	2894.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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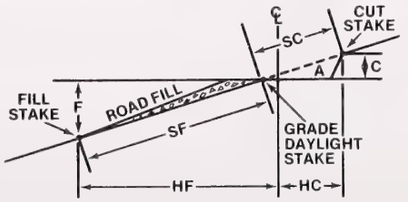
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

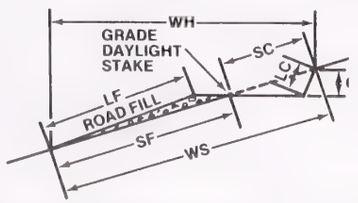
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 19 FEET

CUT SLOPE = VERTICAL

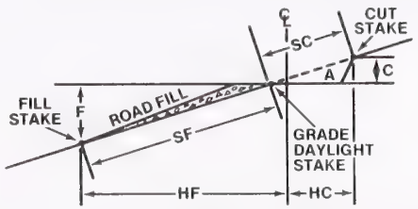
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.3	10.3	20.5	20.6	1.9	1.0	1.0	9.5	1.0	11.0	5.3
12	10.6	10.4	20.9	21.0	2.3	1.2	1.2	9.5	1.3	11.4	6.4
14	10.9	10.5	21.3	21.5	2.7	1.5	1.5	9.5	1.5	11.8	7.6
16	11.3	10.7	21.7	21.9	3.2	1.7	1.7	9.5	1.8	12.2	8.9
18	11.7	10.8	22.1	22.5	3.7	1.9	1.9	9.5	2.1	12.6	10.2
20	12.1	10.9	22.5	23.0	4.3	2.1	2.1	9.5	2.4	13.0	11.5
22	12.5	11.1	23.0	23.6	4.8	2.4	2.4	9.5	2.7	13.5	12.9
24	13.0	11.2	23.5	24.2	5.5	2.6	2.6	9.5	3.0	14.0	14.3
26	13.5	11.4	24.1	24.9	6.1	2.9	2.9	9.5	3.4	14.6	15.9
28	14.0	11.6	24.7	25.6	6.8	3.1	3.1	9.5	3.8	15.2	17.4
30	14.6	11.8	25.3	26.4	7.6	3.4	3.4	9.5	4.2	15.8	19.1
32	15.3	12.0	26.0	27.3	8.4	3.7	3.7	9.5	4.7	16.5	20.8
34	16.1	12.2	26.8	28.3	9.3	3.9	3.9	9.5	5.2	17.3	22.7
36	16.9	12.4	27.6	29.3	10.3	4.2	4.2	9.5	5.7	18.1	24.6
38	17.8	12.7	28.5	30.5	11.4	4.5	4.5	9.5	6.3	19.0	26.6
40	18.8	12.9	29.5	31.8	12.6	4.8	4.8	9.5	7.0	20.0	28.8
42	20.0	13.2	30.6	33.2	14.0	5.1	5.1	9.5	7.7	21.1	31.1
44	21.3	13.5	31.9	34.8	15.5	5.4	5.4	9.5	8.6	22.4	33.6
46	22.9	13.8	33.3	36.7	17.2	5.8	5.8	9.5	9.6	23.8	36.3
48	24.7	14.2	35.0	38.8	19.3	6.1	6.1	9.5	10.7	25.5	39.1
50	26.8	14.5	37.0	41.4	21.6	6.5	6.5	9.5	12.0	27.5	42.3
52	29.4	15.0	39.3	44.3	24.4	6.9	6.9	9.5	13.6	29.8	45.7
54	32.6	15.4	42.2	48.0	27.9	7.3	7.3	9.5	15.5	32.7	49.6
56	36.7	15.9	45.9	52.6	32.3	7.8	7.8	9.5	17.9	36.4	54.0
58	42.2	16.5	50.7	58.6	38.1	8.3	8.3	9.5	21.1	41.2	59.0
60	50.0	17.2	57.6	67.2	46.4	8.8	8.8	9.5	25.7	48.1	64.9
62	62.6	18.0	68.5	80.6	59.5	9.5	9.5	9.5	33.0	59.0	72.3
64	87.8	19.0	90.0	106.8	85.3	10.3	10.3	9.5	47.3	80.5	82.4
66	192.2	20.8	177.8	213.0	190.8	11.5	11.5	9.5	105.9	168.3	99.9

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

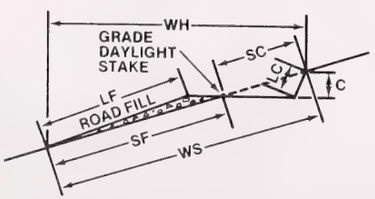
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 19 FEET

CUT SLOPE = .10 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.3	10.4	20.6	20.8	1.9	1.0	1.0	9.6	1.0	11.0	5.3
12	10.7	10.5	21.0	21.2	2.3	1.3	1.3	9.6	1.3	11.4	6.5
14	11.0	10.7	21.4	21.6	2.7	1.5	1.5	9.6	1.5	11.8	7.7
16	11.3	10.8	21.9	22.1	3.2	1.7	1.7	9.7	1.8	12.2	9.0
18	11.7	11.0	22.3	22.7	3.7	1.9	1.9	9.7	2.1	12.6	10.3
20	12.1	11.1	22.8	23.2	4.3	2.2	2.2	9.7	2.4	13.1	11.6
22	12.6	11.3	23.3	23.8	4.9	2.4	2.4	9.7	2.7	13.6	13.1
24	13.1	11.5	23.8	24.5	5.5	2.7	2.7	9.8	3.0	14.1	14.6
26	13.6	11.7	24.4	25.2	6.2	2.9	2.9	9.8	3.4	14.6	16.1
28	14.1	11.9	25.0	26.0	6.9	3.2	3.2	9.8	3.8	15.2	17.7
30	14.8	12.1	25.7	26.8	7.7	3.5	3.5	9.8	4.2	15.9	19.4
32	15.5	12.3	26.4	27.8	8.5	3.8	3.7	9.9	4.7	16.6	21.2
34	16.2	12.5	27.2	28.8	9.4	4.1	4.0	9.9	5.2	17.3	23.1
36	17.1	12.8	28.1	29.9	10.4	4.4	4.3	9.9	5.8	18.2	25.2
38	18.0	13.1	29.1	31.1	11.5	4.7	4.6	10.0	6.4	19.1	27.3
40	19.1	13.4	30.1	32.5	12.8	5.0	5.0	10.0	7.1	20.1	29.6
42	20.3	13.7	31.3	34.0	14.2	5.3	5.3	10.0	7.9	21.3	32.0
44	21.7	14.0	32.6	35.7	15.7	5.7	5.6	10.1	8.7	22.6	34.6
46	23.2	14.4	34.2	37.6	17.5	6.0	6.0	10.1	9.7	24.1	37.4
48	25.1	14.8	35.9	39.8	19.6	6.4	6.4	10.1	10.9	25.8	40.4
50	27.3	15.2	38.0	42.5	22.0	6.8	6.8	10.2	12.2	27.8	43.8
52	29.9	15.6	40.4	45.6	24.9	7.3	7.2	10.2	13.8	30.2	47.5
54	33.2	16.2	43.4	49.4	28.5	7.7	7.7	10.3	15.8	33.2	51.6
56	37.4	16.7	47.3	54.2	33.0	8.2	8.2	10.3	18.3	36.9	56.3
58	43.1	17.4	52.3	60.5	39.0	8.8	8.7	10.4	21.6	41.9	61.7
60	51.2	18.1	59.5	69.3	47.5	9.4	9.3	10.4	26.4	49.0	68.1
62	64.3	19.0	70.8	83.3	61.0	10.1	10.0	10.5	33.9	60.3	76.1
64	90.3	20.2	93.1	110.5	87.7	11.0	10.9	10.6	48.7	82.5	87.1
66	198.3	22.3	184.0	220.5	196.9	12.3	12.3	10.7	109.2	173.3	106.3

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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WS = TOT. WIDTH DISTURB. SLOPE
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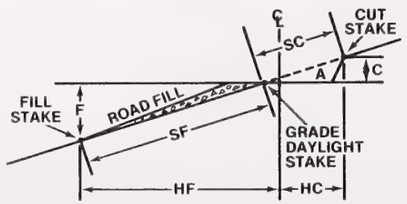
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

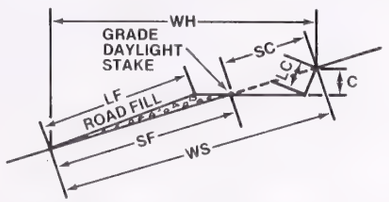
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 19 FEET

CUT SLOPE = .25 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.4	10.5	20.8	20.9	1.9	1.1	1.0	9.8	1.0	11.1	5.3
12	10.7	10.7	21.2	21.4	2.3	1.3	1.3	9.8	1.3	11.4	6.5
14	11.0	10.8	21.7	21.9	2.8	1.5	1.5	9.9	1.5	11.8	7.8
16	11.4	11.0	22.1	22.4	3.2	1.8	1.7	9.9	1.8	12.2	9.1
18	11.8	11.2	22.6	23.0	3.8	2.0	2.0	10.0	2.1	12.6	10.4
20	12.2	11.4	23.2	23.6	4.3	2.3	2.2	10.1	2.4	13.1	11.8
22	12.7	11.6	23.7	24.3	4.9	2.6	2.5	10.1	2.7	13.6	13.3
24	13.2	11.8	24.3	25.0	5.5	2.8	2.8	10.2	3.1	14.1	14.9
26	13.7	12.0	24.9	25.8	6.2	3.1	3.0	10.3	3.5	14.7	16.5
28	14.3	12.3	25.6	26.6	7.0	3.4	3.3	10.3	3.9	15.3	18.2
30	15.0	12.5	26.4	27.5	7.8	3.7	3.6	10.4	4.3	16.0	20.0
32	15.7	12.8	27.2	28.5	8.6	4.0	3.9	10.5	4.8	16.7	21.9
34	16.5	13.1	28.0	29.6	9.6	4.3	4.2	10.6	5.3	17.5	23.9
36	17.4	13.4	29.0	30.8	10.6	4.7	4.5	10.6	5.9	18.3	26.1
38	18.4	13.7	30.0	32.1	11.8	5.0	4.9	10.7	6.5	19.3	28.3
40	19.5	14.1	31.2	33.6	13.0	5.4	5.2	10.8	7.2	20.3	30.8
42	20.7	14.5	32.4	35.2	14.5	5.8	5.6	10.9	8.0	21.5	33.4
44	22.2	14.9	33.9	37.0	16.1	6.2	6.0	11.0	8.9	22.9	36.2
46	23.8	15.3	35.5	39.1	17.9	6.6	6.4	11.1	10.0	24.4	39.3
48	25.8	15.8	37.4	41.5	20.1	7.0	6.8	11.2	11.1	26.2	42.6
50	28.1	16.3	39.6	44.3	22.6	7.5	7.3	11.3	12.5	28.3	46.3
52	30.8	16.8	42.3	47.7	25.6	8.0	7.8	11.4	14.2	30.8	50.4
54	34.3	17.4	45.5	51.7	29.4	8.5	8.3	11.6	16.3	33.9	54.9
56	38.7	18.1	49.6	56.8	34.1	9.1	8.9	11.7	18.9	37.9	60.2
58	44.7	18.9	55.0	63.6	40.4	9.8	9.5	11.9	22.4	43.1	66.2
60	53.2	19.8	62.6	73.0	49.4	10.5	10.2	12.0	27.4	50.6	73.5
62	67.0	20.9	74.7	87.9	63.6	11.4	11.0	12.3	35.3	62.4	82.7
64	94.5	22.4	98.4	116.8	91.8	12.4	12.1	12.5	50.9	85.9	95.3
66	208.6	24.8	194.8	233.4	207.2	14.1	13.6	12.9	114.9	181.9	117.7

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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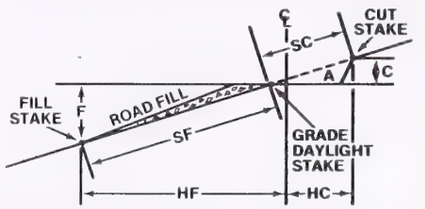
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

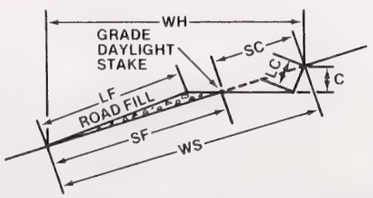
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 19 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.5	10.7	21.1	21.2	1.9	1.2	1.1	10.0	1.0	11.1	5.4
12	10.8	10.9	21.6	21.7	2.3	1.5	1.3	10.2	1.3	11.4	6.7
14	11.2	11.2	22.1	22.3	2.8	1.7	1.5	10.3	1.5	11.8	7.9
16	11.5	11.4	22.6	22.9	3.3	2.0	1.8	10.4	1.8	12.2	9.3
18	12.0	11.6	23.2	23.6	3.8	2.3	2.1	10.5	2.1	12.7	10.7
20	12.4	11.9	23.8	24.3	4.4	2.6	2.3	10.7	2.4	13.2	12.2
22	12.9	12.1	24.5	25.0	5.0	2.9	2.6	10.8	2.8	13.7	13.8
24	13.4	12.4	25.2	25.9	5.7	3.2	2.9	11.0	3.1	14.2	15.4
26	14.0	12.7	25.9	26.8	6.4	3.6	3.2	11.1	3.5	14.8	17.2
28	14.7	13.1	26.7	27.7	7.1	3.9	3.5	11.3	4.0	15.4	19.0
30	15.4	13.4	27.5	28.8	8.0	4.3	3.9	11.4	4.4	16.1	21.0
32	16.1	13.8	28.5	29.9	8.9	4.7	4.2	11.6	4.9	16.9	23.1
34	17.0	14.2	29.5	31.1	9.9	5.1	4.6	11.8	5.5	17.7	25.3
36	17.9	14.6	30.6	32.5	10.9	5.5	4.9	12.0	6.1	18.6	27.7
38	19.0	15.0	31.8	34.0	12.2	6.0	5.3	12.2	6.7	19.6	30.3
40	20.2	15.5	33.1	35.7	13.5	6.4	5.8	12.4	7.5	20.7	33.1
42	21.5	16.0	34.6	37.5	15.0	6.9	6.2	12.6	8.3	22.0	36.1
44	23.1	16.5	36.3	39.6	16.8	7.4	6.7	12.8	9.3	23.5	39.3
46	24.9	17.1	38.2	42.0	18.8	8.0	7.2	13.1	10.4	25.1	42.9
48	27.0	17.8	40.4	44.8	21.1	8.6	7.7	13.3	11.7	27.0	46.9
50	29.5	18.5	42.9	48.0	23.8	9.2	8.3	13.6	13.2	29.3	51.3
52	32.6	19.3	46.0	51.8	27.1	9.9	8.9	13.9	15.0	32.0	56.2
54	36.4	20.1	49.7	56.5	31.1	10.7	9.6	14.3	17.3	35.4	61.8
56	41.2	21.1	54.4	62.3	36.3	11.5	10.3	14.7	20.1	39.7	68.2
58	47.8	22.2	60.5	70.0	43.2	12.4	11.1	15.1	24.0	45.5	75.8
60	57.3	23.5	69.2	80.7	53.1	13.5	12.1	15.5	29.5	53.7	85.1
62	72.5	25.0	82.9	97.5	68.9	14.8	13.2	16.1	38.2	66.8	96.9
64	103.1	27.1	109.6	130.2	100.2	16.3	14.6	16.8	55.6	92.8	113.5
66	230.5	30.5	217.8	261.0	228.9	18.8	16.8	17.9	126.9	199.9	143.6

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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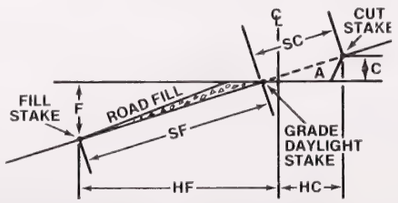
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

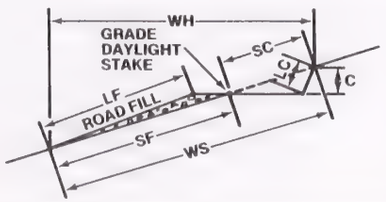
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 19 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.5	11.0	21.4	21.5	1.9	1.4	1.1	10.3	1.0	11.1	5.5
12	10.9	11.2	21.9	22.1	2.3	1.7	1.3	10.5	1.3	11.4	6.8
14	11.3	11.5	22.5	22.8	2.8	2.0	1.6	10.7	1.6	11.8	8.1
16	11.7	11.8	23.2	23.5	3.3	2.3	1.9	10.9	1.8	12.3	9.5
18	12.1	12.1	23.8	24.2	3.9	2.7	2.1	11.1	2.1	12.7	11.0
20	12.6	12.4	24.5	25.0	4.5	3.0	2.4	11.3	2.5	13.2	12.6
22	13.1	12.8	25.3	25.9	5.1	3.4	2.7	11.6	2.8	13.7	14.3
24	13.7	13.1	26.1	26.8	5.8	3.8	3.1	11.8	3.2	14.3	16.0
26	14.3	13.5	27.0	27.9	6.5	4.3	3.4	12.1	3.6	14.9	17.9
28	15.0	14.0	27.9	29.0	7.3	4.7	3.8	12.3	4.0	15.6	20.0
30	15.8	14.4	28.9	30.2	8.2	5.2	4.1	12.6	4.5	16.3	22.1
32	16.6	14.9	30.0	31.5	9.1	5.7	4.5	12.9	5.1	17.1	24.5
34	17.5	15.4	31.2	32.9	10.2	6.2	5.0	13.2	5.6	18.0	27.0
36	18.6	16.0	32.5	34.5	11.3	6.8	5.4	13.6	6.3	18.9	29.7
38	19.7	16.6	33.9	36.3	12.6	7.4	5.9	13.9	7.0	20.0	32.6
40	21.0	17.2	35.5	38.2	14.1	8.0	6.4	14.3	7.8	21.2	35.8
42	22.5	17.9	37.3	40.4	15.7	8.7	6.9	14.7	8.7	22.6	39.3
44	24.2	18.7	39.3	42.9	17.6	9.4	7.5	15.1	9.7	24.1	43.2
46	26.2	19.5	41.5	45.7	19.7	10.2	8.2	15.6	10.9	25.9	47.5
48	28.5	20.5	44.1	49.0	22.2	11.1	8.9	16.1	12.3	28.0	52.2
50	31.3	21.5	47.2	52.8	25.2	12.0	9.6	16.7	14.0	30.5	57.6
52	34.7	22.6	50.8	57.3	28.9	13.0	10.4	17.3	16.0	33.5	63.7
54	38.9	23.9	55.2	62.8	33.3	14.2	11.3	18.0	18.5	37.2	70.8
56	44.4	25.3	60.8	69.7	39.1	15.4	12.4	18.8	21.7	42.0	79.1
58	51.8	27.0	68.1	78.8	46.9	16.9	13.5	19.6	26.0	48.5	89.1
60	62.5	28.9	78.4	91.4	58.0	18.6	14.9	20.7	32.2	57.8	101.5
62	79.9	31.3	94.5	111.2	75.9	20.6	16.5	21.9	42.1	72.6	117.6
64	114.8	34.5	125.8	149.4	111.6	23.3	18.6	23.5	61.9	102.4	140.9
66	261.4	39.9	251.5	301.3	259.6	27.5	22.0	26.0	144.0	225.5	184.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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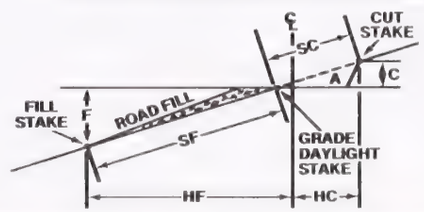
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL
A = END AREA OF CUT - SQ. FT.

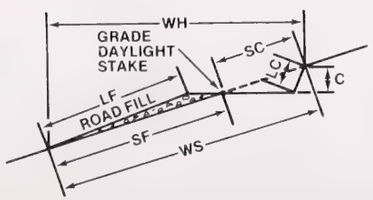
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 19 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.6	11.2	21.7	21.8	1.9	1.6	1.1	10.6	1.1	11.1	5.6
12	11.0	11.5	22.3	22.5	2.4	1.9	1.4	10.9	1.3	11.5	6.9
14	11.4	11.8	23.0	23.2	2.8	2.3	1.6	11.1	1.6	11.9	8.3
16	11.8	12.2	23.7	24.0	3.4	2.7	1.9	11.4	1.9	12.3	9.8
18	12.3	12.6	24.5	24.9	3.9	3.2	2.2	11.7	2.2	12.8	11.3
20	12.8	13.0	25.3	25.8	4.5	3.6	2.6	12.1	2.5	13.3	13.0
22	13.4	13.4	26.2	26.8	5.2	4.1	2.9	12.4	2.9	13.8	14.8
24	14.0	13.9	27.1	27.9	5.9	4.6	3.3	12.8	3.3	14.4	16.7
26	14.7	14.4	28.2	29.1	6.7	5.1	3.6	13.1	3.7	15.0	18.8
28	15.4	15.0	29.3	30.4	7.5	5.7	4.0	13.5	4.2	15.7	21.0
30	16.2	15.6	30.5	31.8	8.4	6.3	4.5	14.0	4.7	16.5	23.4
32	17.1	16.2	31.8	33.4	9.4	7.0	5.0	14.5	5.2	17.3	26.0
34	18.1	16.9	33.2	35.1	10.5	7.7	5.5	15.0	5.8	18.3	28.9
36	19.3	17.7	34.8	37.0	11.8	8.5	6.0	15.5	6.5	19.3	32.0
38	20.5	18.5	36.5	39.1	13.1	9.3	6.6	16.1	7.3	20.4	35.4
40	22.0	19.5	38.5	41.4	14.7	10.2	7.2	16.7	8.2	21.7	39.2
42	23.6	20.5	40.6	44.1	16.5	11.2	7.9	17.4	9.1	23.2	43.4
44	25.5	21.6	43.1	47.1	18.5	12.3	8.7	18.2	10.3	24.9	48.0
46	27.7	22.8	45.9	50.5	20.9	13.5	9.5	19.0	11.6	26.9	53.3
48	30.4	24.2	49.2	54.5	23.7	14.8	10.5	20.0	13.1	29.2	59.3
50	33.5	25.7	53.0	59.3	27.0	16.3	11.5	21.0	15.0	32.0	66.1
52	37.4	27.5	57.6	64.9	31.1	17.9	12.7	22.2	17.3	35.4	74.1
54	42.3	29.5	63.1	71.8	36.2	19.8	14.0	23.5	20.1	39.6	83.5
56	48.6	31.8	70.2	80.4	42.8	22.0	15.5	25.0	23.8	45.1	94.9
58	57.3	34.6	79.5	91.8	51.8	24.5	17.3	26.8	28.7	52.6	108.9
60	69.9	37.9	92.5	107.8	64.8	27.6	19.5	29.0	36.0	63.5	126.8
62	90.5	42.2	112.8	132.7	86.0	31.4	22.2	31.7	47.7	81.1	151.2
64	132.6	47.9	152.0	180.5	128.8	36.5	25.8	35.3	71.5	116.7	187.8
66	310.8	57.8	307.7	368.6	308.6	45.0	31.8	41.3	171.2	266.3	261.2

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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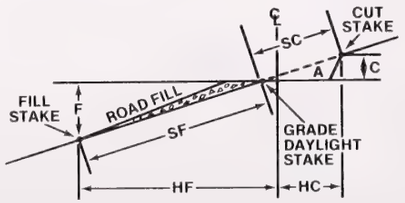
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

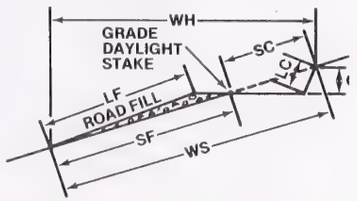
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 19 FEET

CUT SLOPE = 1.5 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.8	11.7	22.4	22.5	1.9	2.1	1.2	11.2	1.1	11.1	5.7
12	11.2	12.1	23.2	23.3	2.4	2.6	1.4	11.7	1.3	11.5	7.2
14	11.6	12.6	24.1	24.3	2.9	3.2	1.8	12.1	1.6	11.9	8.7
16	12.1	13.2	25.0	25.3	3.5	3.8	2.1	12.6	1.9	12.4	10.3
18	12.7	13.8	26.0	26.4	4.1	4.4	2.4	13.2	2.2	12.9	12.0
20	13.3	14.4	27.1	27.7	4.7	5.1	2.8	13.7	2.6	13.4	14.0
22	13.9	15.1	28.4	29.0	5.4	5.9	3.2	14.4	3.0	14.0	16.0
24	14.6	15.9	29.7	30.5	6.2	6.7	3.7	15.1	3.4	14.6	18.3
26	15.4	16.7	31.1	32.2	7.0	7.6	4.2	15.8	3.9	15.3	20.8
28	16.3	17.7	32.8	34.0	7.9	8.6	4.8	16.7	4.4	16.1	23.6
30	17.3	18.8	34.5	36.1	9.0	9.7	5.4	17.6	5.0	17.0	26.7
32	18.4	20.0	36.5	38.4	10.1	11.0	6.1	18.6	5.6	17.9	30.1
34	19.6	21.3	38.8	41.0	11.4	12.4	6.9	19.8	6.3	19.0	33.9
36	21.1	22.8	41.3	43.9	12.9	13.9	7.7	21.1	7.1	20.2	38.2
38	22.7	24.6	44.2	47.3	14.5	15.7	8.7	22.6	8.1	21.6	43.2
40	24.5	26.6	47.5	51.2	16.4	17.8	9.9	24.3	9.1	23.2	48.9
42	26.7	29.0	51.4	55.7	18.7	20.2	11.2	26.3	10.3	25.0	55.5
44	29.3	31.8	55.9	61.1	21.3	23.1	12.8	28.7	11.8	27.2	63.2
46	32.4	35.1	61.3	67.5	24.4	26.4	14.7	31.5	13.5	29.8	72.5
48	36.1	39.2	67.9	75.3	28.2	30.6	16.9	34.9	15.6	32.9	83.8
50	40.8	44.2	76.0	85.0	32.9	35.6	19.8	39.2	18.2	36.8	97.7
52	46.7	50.6	86.4	97.3	38.8	42.1	23.4	44.5	21.5	41.8	115.5
54	54.5	59.1	100.0	113.6	46.7	50.7	28.1	51.6	25.9	48.4	138.9
56	65.3	70.8	118.7	136.1	57.5	62.4	34.6	61.4	31.9	57.3	171.0
58	81.0	87.9	146.2	169.0	73.3	79.5	44.1	75.7	40.7	70.5	218.0
60	106.3	115.3	190.0	221.6	98.6	106.9	59.3	98.5	54.7	91.5	293.2
62	153.2	166.2	271.4	319.4	145.5	157.9	87.6	140.8	80.7	130.6	432.8
64	270.5	293.4	475.0	564.0	262.9	285.1	158.2	246.8	145.8	228.2	781.8
66	1092.0	1184.5	1900.0	2276.5	1084.4	1176.2	652.5	988.2	601.5	911.8	3225.0

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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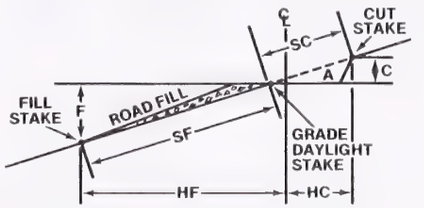
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

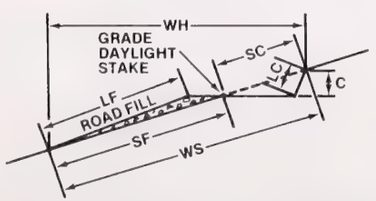
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 20 FEET

CUT SLOPE = VERTICAL

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.9	10.9	21.6	21.7	1.9	1.1	1.1	10.0	1.1	11.6	5.8
12	11.2	11.0	22.0	22.2	2.4	1.3	1.3	10.0	1.3	12.0	7.1
14	11.5	11.1	22.4	22.6	2.9	1.5	1.5	10.0	1.6	12.4	8.5
16	11.9	11.2	22.8	23.1	3.4	1.8	1.8	10.0	1.9	12.8	9.8
18	12.3	11.4	23.3	23.6	3.9	2.0	2.0	10.0	2.2	13.3	11.3
20	12.7	11.5	23.7	24.2	4.5	2.3	2.3	10.0	2.5	13.7	12.7
22	13.1	11.7	24.2	24.8	5.1	2.5	2.5	10.0	2.8	14.2	14.3
24	13.6	11.8	24.8	25.5	5.7	2.8	2.8	10.0	3.2	14.8	15.9
26	14.2	12.0	25.4	26.2	6.4	3.0	3.0	10.0	3.6	15.4	17.6
28	14.8	12.2	26.0	27.0	7.2	3.3	3.3	10.0	4.0	16.0	19.3
30	15.4	12.4	26.6	27.8	8.0	3.6	3.6	10.0	4.4	16.6	21.2
32	16.1	12.6	27.4	28.7	8.9	3.8	3.8	10.0	4.9	17.4	23.1
34	16.9	12.8	28.2	29.7	9.8	4.1	4.1	10.0	5.4	18.2	25.1
36	17.8	13.1	29.0	30.9	10.9	4.4	4.4	10.0	6.0	19.0	27.3
38	18.7	13.3	30.0	32.1	12.0	4.7	4.7	10.0	6.7	20.0	29.5
40	19.8	13.6	31.0	33.4	13.3	5.1	5.1	10.0	7.4	21.0	31.9
42	21.1	13.9	32.2	35.0	14.7	5.4	5.4	10.0	8.2	22.2	34.5
44	22.5	14.2	33.6	36.7	16.3	5.7	5.7	10.0	9.0	23.6	37.2
46	24.1	14.5	35.1	38.6	18.1	6.1	6.1	10.0	10.1	25.1	40.2
48	26.0	14.9	36.9	40.9	20.3	6.5	6.5	10.0	11.2	26.9	43.4
50	28.2	15.3	38.9	43.5	22.8	6.8	6.8	10.0	12.6	28.9	46.9
52	30.9	15.7	41.4	46.7	25.7	7.3	7.3	10.0	14.3	31.4	50.7
54	34.3	16.2	44.4	50.5	29.4	7.7	7.7	10.0	16.3	34.4	55.0
56	38.6	16.7	48.3	55.3	34.0	8.2	8.2	10.0	18.9	38.3	59.8
58	44.4	17.4	53.4	61.7	40.1	8.7	8.7	10.0	22.3	43.4	65.3
60	52.7	18.1	60.6	70.7	48.8	9.3	9.3	10.0	27.1	50.6	71.9
62	65.9	18.9	72.1	84.8	62.6	10.0	10.0	10.0	34.7	62.1	80.1
64	92.4	20.0	94.7	112.5	89.8	10.8	10.8	10.0	49.8	84.7	91.2
66	202.3	21.9	187.1	224.2	200.9	12.1	12.1	10.0	111.4	177.1	110.7

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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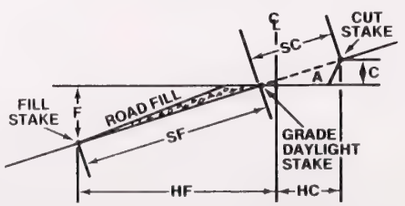
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

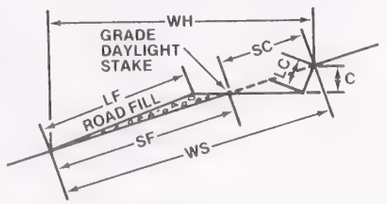
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 20 FEET

CUT SLOPE = .10 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.9	10.9	21.7	21.8	2.0	1.1	1.1	10.1	1.1	11.6	5.9
12	11.2	11.1	22.1	22.3	2.4	1.3	1.3	10.1	1.3	12.0	7.2
14	11.6	11.2	22.6	22.8	2.9	1.6	1.6	10.2	1.6	12.4	8.5
16	11.9	11.4	23.0	23.3	3.4	1.8	1.8	10.2	1.9	12.8	9.9
18	12.3	11.5	23.5	23.9	3.9	2.1	2.0	10.2	2.2	13.3	11.4
20	12.8	11.7	24.0	24.5	4.5	2.3	2.3	10.2	2.5	13.8	12.9
22	13.2	11.9	24.5	25.1	5.1	2.6	2.6	10.3	2.8	14.3	14.5
24	13.7	12.1	25.1	25.8	5.8	2.8	2.8	10.3	3.2	14.8	16.1
26	14.3	12.3	25.7	26.6	6.5	3.1	3.1	10.3	3.6	15.4	17.8
28	14.9	12.5	26.4	27.4	7.2	3.4	3.4	10.3	4.0	16.0	19.7
30	15.6	12.7	27.1	28.3	8.1	3.7	3.7	10.4	4.5	16.7	21.5
32	16.3	12.9	27.8	29.2	8.9	4.0	3.9	10.4	5.0	17.4	23.5
34	17.1	13.2	28.7	30.3	9.9	4.3	4.2	10.4	5.5	18.3	25.6
36	18.0	13.5	29.6	31.5	11.0	4.6	4.6	10.5	6.1	19.1	27.9
38	19.0	13.8	30.6	32.7	12.2	4.9	4.9	10.5	6.7	20.1	30.2
40	20.1	14.1	31.7	34.2	13.5	5.3	5.2	10.5	7.5	21.2	32.8
42	21.4	14.4	33.0	35.8	14.9	5.6	5.6	10.6	8.3	22.4	35.4
44	22.8	14.7	34.4	37.5	16.6	6.0	5.9	10.6	9.2	23.8	38.3
46	24.5	15.1	36.0	39.6	18.4	6.4	6.3	10.6	10.2	25.3	41.4
48	26.4	15.5	37.8	41.9	20.6	6.8	6.7	10.7	11.4	27.1	44.8
50	28.7	16.0	40.0	44.7	23.2	7.2	7.1	10.7	12.8	29.3	48.5
52	31.5	16.5	42.6	48.0	26.2	7.6	7.6	10.8	14.5	31.8	52.6
54	35.0	17.0	45.7	52.0	30.0	8.1	8.1	10.8	16.6	34.9	57.2
56	39.4	17.6	49.7	57.0	34.7	8.6	8.6	10.9	19.3	38.9	62.3
58	45.4	18.3	55.1	63.7	41.0	9.2	9.2	10.9	22.8	44.1	68.3
60	53.9	19.1	62.6	73.0	50.0	9.9	9.8	11.0	27.7	51.6	75.5
62	67.6	20.0	74.5	87.7	64.2	10.6	10.6	11.1	35.6	63.5	84.4
64	95.0	21.3	98.0	116.3	92.3	11.5	11.5	11.1	51.2	86.8	96.5
66	208.7	23.4	193.7	232.1	207.2	13.0	12.9	11.3	115.0	182.4	117.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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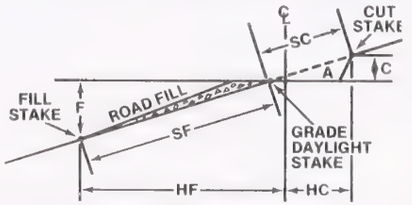
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

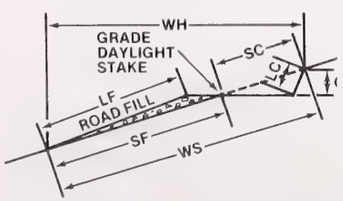
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 20 FEET

CUT SLOPE = .25 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	10.9	11.1	21.9	22.0	2.0	1.1	1.1	10.3	1.1	11.6	5.9
12	11.3	11.2	22.3	22.5	2.4	1.4	1.3	10.3	1.3	12.0	7.2
14	11.6	11.4	22.8	23.0	2.9	1.6	1.6	10.4	1.6	12.4	8.6
16	12.0	11.6	23.3	23.6	3.4	1.9	1.8	10.5	1.9	12.8	10.1
18	12.4	11.8	23.8	24.2	4.0	2.2	2.1	10.5	2.2	13.3	11.6
20	12.9	12.0	24.4	24.9	4.6	2.4	2.4	10.6	2.5	13.8	13.1
22	13.4	12.2	25.0	25.6	5.2	2.7	2.6	10.7	2.9	14.3	14.8
24	13.9	12.4	25.6	26.3	5.8	3.0	2.9	10.7	3.2	14.9	16.5
26	14.5	12.7	26.3	27.1	6.6	3.3	3.2	10.8	3.6	15.5	18.3
28	15.1	12.9	27.0	28.0	7.3	3.6	3.5	10.9	4.1	16.1	20.2
30	15.8	13.2	27.7	29.0	8.2	3.9	3.8	10.9	4.5	16.8	22.2
32	16.5	13.5	28.6	30.0	9.1	4.2	4.1	11.0	5.0	17.6	24.3
34	17.4	13.8	29.5	31.2	10.1	4.6	4.4	11.1	5.6	18.4	26.5
36	18.3	14.1	30.5	32.4	11.2	4.9	4.8	11.2	6.2	19.3	28.9
38	19.3	14.5	31.6	33.8	12.4	5.3	5.1	11.3	6.9	20.3	31.4
40	20.5	14.8	32.8	35.3	13.7	5.7	5.5	11.4	7.6	21.4	34.1
42	21.8	15.2	34.1	37.0	15.2	6.1	5.9	11.5	8.4	22.7	37.0
44	23.3	15.6	35.7	39.0	16.9	6.5	6.3	11.6	9.4	24.1	40.1
46	25.1	16.1	37.4	41.2	18.9	6.9	6.7	11.7	10.5	25.7	43.5
48	27.1	16.6	39.4	43.7	21.1	7.4	7.2	11.8	11.7	27.6	47.2
50	29.5	17.1	41.7	46.6	23.8	7.9	7.7	11.9	13.2	29.8	51.3
52	32.5	17.7	44.5	50.2	27.0	8.4	8.2	12.0	15.0	32.5	55.8
54	36.1	18.3	47.9	54.4	30.9	9.0	8.7	12.2	17.2	35.7	60.9
56	40.8	19.1	52.2	59.8	35.9	9.6	9.3	12.3	19.9	39.9	66.7
58	47.0	19.9	57.9	66.9	42.5	10.3	10.0	12.5	23.6	45.4	73.4
60	56.0	20.8	65.9	76.9	52.0	11.1	10.7	12.7	28.8	53.2	81.5
62	70.5	22.0	78.6	92.5	67.0	12.0	11.6	12.9	37.1	65.7	91.7
64	99.4	23.5	103.6	123.0	96.6	13.1	12.7	13.2	53.6	90.4	105.6
66	219.6	26.1	205.1	245.7	218.1	14.8	14.4	13.6	121.0	191.5	130.4

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
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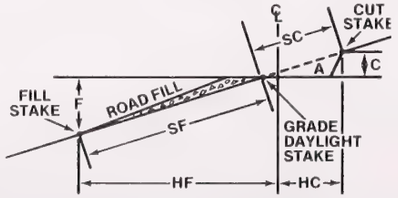
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

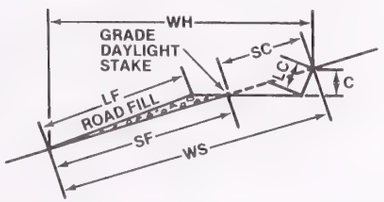
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 20 FEET

CUT SLOPE = .50 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	11.0	11.3	22.2	22.3	2.0	1.3	1.1	10.6	1.1	11.6	6.0
12	11.4	11.5	22.7	22.9	2.4	1.5	1.4	10.7	1.4	12.0	7.4
14	11.7	11.7	23.3	23.5	2.9	1.8	1.6	10.8	1.6	12.4	8.8
16	12.2	12.0	23.8	24.1	3.5	2.1	1.9	10.9	1.9	12.9	10.3
18	12.6	12.2	24.4	24.8	4.0	2.4	2.2	11.1	2.2	13.3	11.9
20	13.1	12.5	25.1	25.6	4.6	2.7	2.5	11.2	2.6	13.8	13.5
22	13.6	12.8	25.8	26.4	5.3	3.1	2.7	11.4	2.9	14.4	15.3
24	14.1	13.1	26.5	27.2	6.0	3.4	3.1	11.5	3.3	15.0	17.1
26	14.8	13.4	27.3	28.2	6.7	3.8	3.4	11.7	3.7	15.6	19.0
28	15.4	13.7	28.1	29.2	7.5	4.1	3.7	11.9	4.2	16.2	21.1
30	16.2	14.1	29.0	30.3	8.4	4.5	4.1	12.0	4.6	17.0	23.3
32	17.0	14.5	30.0	31.5	9.3	4.9	4.4	12.2	5.2	17.8	25.6
34	17.9	14.9	31.0	32.8	10.4	5.4	4.8	12.4	5.8	18.6	28.1
36	18.9	15.3	32.2	34.2	11.5	5.8	5.2	12.6	6.4	19.6	30.7
38	20.0	15.8	33.5	35.8	12.8	6.3	5.6	12.8	7.1	20.7	33.6
40	21.3	16.3	34.9	37.6	14.2	6.8	6.1	13.0	7.9	21.8	36.6
42	22.7	16.8	36.4	39.5	15.8	7.3	6.5	13.3	8.8	23.2	40.0
44	24.3	17.4	38.2	41.7	17.7	7.8	7.0	13.5	9.8	24.7	43.6
46	26.2	18.0	40.2	44.2	19.7	8.4	7.5	13.8	11.0	26.4	47.6
48	28.4	18.7	42.5	47.1	22.2	9.1	8.1	14.0	12.3	28.5	51.9
50	31.1	19.5	45.2	50.5	25.1	9.7	8.7	14.4	13.9	30.8	56.8
52	34.3	20.3	48.4	54.5	28.5	10.5	9.4	14.7	15.8	33.7	62.2
54	38.3	21.2	52.3	59.4	32.8	11.2	10.1	15.0	18.2	37.3	68.4
56	43.4	22.2	57.2	65.6	38.2	12.1	10.8	15.4	21.2	41.8	75.6
58	50.3	23.4	63.7	73.7	45.5	13.1	11.7	15.9	25.2	47.9	84.0
60	60.3	24.7	72.9	85.0	55.9	14.2	12.7	16.4	31.0	56.5	94.3
62	76.3	26.4	87.3	102.7	72.5	15.5	13.9	16.9	40.2	70.3	107.4
64	108.5	28.5	115.4	137.0	105.4	17.2	15.4	17.7	58.5	97.7	125.7
66	242.6	32.1	229.3	274.7	240.9	19.8	17.7	18.9	133.6	210.4	159.1

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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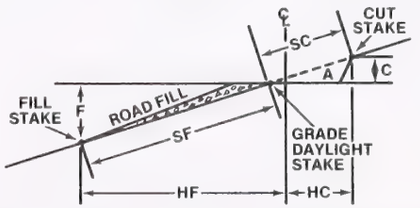
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

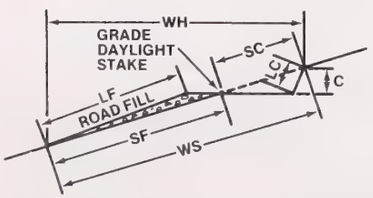
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 20 FEET

CUT SLOPE = .75 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	11.1	11.5	22.5	22.6	2.0	1.4	1.1	10.9	1.1	11.7	6.1
12	11.5	11.8	23.1	23.3	2.5	1.8	1.4	11.1	1.4	12.0	7.5
14	11.9	12.1	23.7	24.0	3.0	2.1	1.7	11.3	1.6	12.5	9.0
16	12.3	12.4	24.4	24.7	3.5	2.4	2.0	11.5	1.9	12.9	10.5
18	12.8	12.7	25.1	25.5	4.1	2.8	2.3	11.7	2.3	13.4	12.2
20	13.3	13.1	25.8	26.3	4.7	3.2	2.6	11.9	2.6	13.9	14.0
22	13.8	13.4	26.6	27.3	5.4	3.6	2.9	12.2	3.0	14.5	15.8
24	14.4	13.8	27.5	28.2	6.1	4.0	3.2	12.4	3.4	15.0	17.8
26	15.1	14.2	28.4	29.3	6.8	4.5	3.6	12.7	3.8	15.7	19.9
28	15.8	14.7	29.4	30.5	7.7	5.0	4.0	13.0	4.3	16.4	22.1
30	16.6	15.2	30.4	31.8	8.6	5.4	4.4	13.3	4.8	17.2	24.5
32	17.5	15.7	31.6	33.1	9.6	6.0	4.8	13.6	5.3	18.0	27.1
34	18.4	16.2	32.8	34.7	10.7	6.5	5.2	13.9	5.9	18.9	29.9
36	19.5	16.8	34.2	36.3	11.9	7.1	5.7	14.3	6.6	19.9	32.9
38	20.7	17.4	35.7	38.2	13.3	7.7	6.2	14.6	7.4	21.1	36.1
40	22.1	18.1	37.4	40.3	14.8	8.4	6.7	15.1	8.2	22.3	39.7
42	23.7	18.9	39.2	42.6	16.5	9.1	7.3	15.5	9.2	23.8	43.6
44	25.5	19.7	41.3	45.2	18.5	9.9	7.9	15.9	10.3	25.4	47.9
46	27.6	20.6	43.7	48.1	20.8	10.7	8.6	16.4	11.5	27.3	52.6
48	30.0	21.5	46.5	51.5	23.4	11.6	9.3	17.0	13.0	29.5	57.9
50	32.9	22.6	49.7	55.5	26.6	12.6	10.1	17.6	14.7	32.1	63.8
52	36.5	23.8	53.5	60.3	30.4	13.7	11.0	18.2	16.8	35.3	70.6
54	41.0	25.1	58.2	66.1	35.1	14.9	11.9	19.0	19.5	39.2	78.5
56	46.7	26.6	64.0	73.4	41.2	16.3	13.0	19.8	22.8	44.3	87.7
58	54.5	28.4	71.7	82.9	49.3	17.8	14.2	20.7	27.4	51.0	98.7
60	65.8	30.4	82.5	96.3	61.0	19.6	15.7	21.7	33.9	60.8	112.4
62	84.1	33.0	99.5	117.1	79.9	21.7	17.4	23.0	44.3	76.5	130.3
64	120.9	36.4	132.4	157.2	117.5	24.5	19.6	24.7	65.2	107.7	156.1
66	275.2	42.0	264.7	317.2	273.3	28.9	23.1	27.4	151.6	237.4	204.8

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
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WH = TOT. WIDTH DISTURB. HOR.
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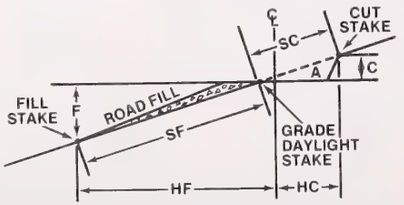
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

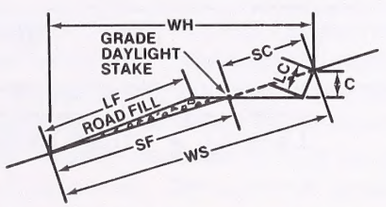
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 20 FEET

CUT SLOPE = 1.0 TO 1

SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	11.2	11.8	22.8	23.0	2.0	1.7	1.2	11.2	1.1	11.7	6.2
12	11.6	12.1	23.5	23.7	2.5	2.0	1.4	11.4	1.4	12.1	7.6
14	12.0	12.5	24.2	24.5	3.0	2.4	1.7	11.7	1.7	12.5	9.2
16	12.5	12.8	25.0	25.3	3.5	2.9	2.0	12.0	2.0	13.0	10.8
18	13.0	13.3	25.8	26.2	4.1	3.3	2.3	12.3	2.3	13.4	12.6
20	13.5	13.7	26.7	27.2	4.8	3.8	2.7	12.7	2.6	14.0	14.4
22	14.1	14.2	27.6	28.2	5.5	4.3	3.0	13.0	3.0	14.5	16.4
24	14.7	14.7	28.6	29.4	6.2	4.8	3.4	13.4	3.4	15.2	18.5
26	15.4	15.2	29.7	30.6	7.0	5.4	3.8	13.8	3.9	15.8	20.8
28	16.2	15.8	30.8	32.0	7.9	6.0	4.3	14.3	4.4	16.6	23.3
30	17.1	16.4	32.1	33.5	8.8	6.7	4.7	14.7	4.9	17.4	26.0
32	18.0	17.1	33.5	35.1	9.9	7.4	5.2	15.2	5.5	18.2	28.8
34	19.1	17.8	35.0	36.9	11.1	8.1	5.7	15.7	6.1	19.2	32.0
36	20.3	18.6	36.6	38.9	12.4	8.9	6.3	16.3	6.9	20.3	35.4
38	21.6	19.5	38.4	41.1	13.8	9.8	6.9	16.9	7.7	21.5	39.2
40	23.1	20.5	40.5	43.6	15.5	10.8	7.6	17.6	8.6	22.9	43.4
42	24.9	21.5	42.8	46.4	17.4	11.8	8.3	18.3	9.6	24.4	48.0
44	26.9	22.7	45.4	49.6	19.5	12.9	9.1	19.1	10.8	26.2	53.2
46	29.2	24.0	48.3	53.2	22.0	14.2	10.0	20.0	12.2	28.3	59.1
48	32.0	25.4	51.8	57.4	24.9	15.6	11.0	21.0	13.8	30.8	65.7
50	35.3	27.1	55.8	62.4	28.5	17.1	12.1	22.1	15.8	33.7	73.3
52	39.4	28.9	60.6	68.3	32.8	18.9	13.3	23.3	18.2	37.3	82.1
54	44.5	31.0	66.5	75.5	38.1	20.8	14.7	24.7	21.1	41.7	92.6
56	51.2	33.5	73.9	84.7	45.1	23.1	16.4	26.4	25.0	47.5	105.1
58	60.3	36.4	83.6	96.7	54.5	25.8	18.3	28.3	30.3	55.4	120.7
60	73.6	39.9	97.3	113.5	68.3	29.0	20.5	30.5	37.9	66.8	140.6
62	95.3	44.4	118.7	139.7	90.5	33.1	23.4	33.4	50.2	85.3	167.5
64	139.5	50.5	160.0	190.0	135.6	38.5	27.2	37.2	75.2	122.8	208.0
66	327.2	60.9	323.8	388.0	324.9	47.4	33.5	43.5	180.2	280.3	289.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



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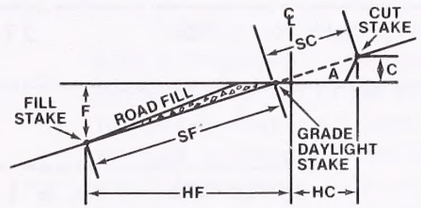
ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

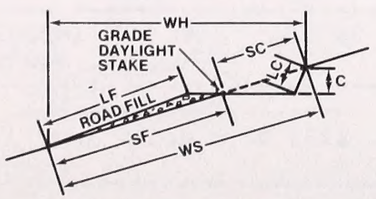
ROAD GEOMETRY DATA USING A 1.5 TO 1 FILL SLOPE

ROAD WIDTH = 20 FEET

CUT SLOPE = 1.5 TO 1

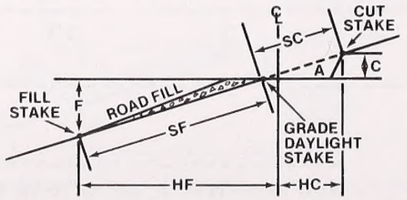
SLOPE PERCENT	SF	SC	WH	WS	LF	LC	C	HC	F	HF	A
10	11.3	12.3	23.5	23.6	2.0	2.2	1.2	11.8	1.1	11.7	6.4
12	11.8	12.8	24.4	24.6	2.5	2.7	1.5	12.3	1.4	12.1	7.9
14	12.3	13.3	25.3	25.6	3.1	3.3	1.8	12.8	1.7	12.6	9.6
16	12.8	13.9	26.3	26.7	3.6	3.9	2.2	13.3	2.0	13.0	11.4
18	13.4	14.5	27.4	27.8	4.3	4.6	2.6	13.8	2.4	13.5	13.4
20	14.0	15.2	28.6	29.1	4.9	5.4	3.0	14.5	2.7	14.1	15.5
22	14.7	15.9	29.9	30.6	5.7	6.2	3.4	15.1	3.2	14.7	17.8
24	15.4	16.7	31.3	32.1	6.5	7.0	3.9	15.9	3.6	15.4	20.3
26	16.3	17.6	32.8	33.9	7.4	8.0	4.4	16.7	4.1	16.1	23.1
28	17.2	18.6	34.5	35.8	8.3	9.1	5.0	17.5	4.6	16.9	26.1
30	18.2	19.8	36.4	38.0	9.4	10.2	5.7	18.5	5.2	17.8	29.5
32	19.4	21.0	38.5	40.4	10.6	11.5	6.4	19.6	5.9	18.9	33.3
34	20.7	22.4	40.8	43.1	12.0	13.0	7.2	20.8	6.7	20.0	37.6
36	22.2	24.0	43.5	46.2	13.5	14.7	8.1	22.2	7.5	21.3	42.4
38	23.9	25.9	46.5	49.8	15.3	16.6	9.2	23.8	8.5	22.7	47.8
40	25.8	28.0	50.0	53.9	17.3	18.8	10.4	25.6	9.6	24.4	54.1
42	28.1	30.5	54.1	58.6	19.6	21.3	11.8	27.7	10.9	26.3	61.5
44	30.8	33.4	58.8	64.3	22.4	24.3	13.5	30.2	12.4	28.6	70.1
46	34.1	36.9	64.5	71.0	25.7	27.8	15.4	33.2	14.2	31.4	80.3
48	38.0	41.2	71.4	79.2	29.6	32.2	17.8	36.8	16.4	34.7	92.8
50	42.9	46.5	80.0	89.4	34.6	37.5	20.8	41.2	19.2	38.8	108.3
52	49.2	53.3	90.9	102.5	40.9	44.3	24.6	46.9	22.7	44.0	128.0
54	57.4	62.2	105.3	119.6	49.2	53.3	29.6	54.4	27.3	50.9	153.9
56	68.7	74.5	125.0	143.3	60.5	65.7	36.4	64.6	33.6	60.4	189.5
58	85.3	92.5	153.8	177.9	77.2	83.7	46.4	79.6	42.8	74.2	241.6
60	111.9	121.4	200.0	233.2	103.8	112.6	62.4	103.7	57.6	96.3	324.9
62	161.3	174.9	285.7	336.2	153.2	166.2	92.2	148.3	85.0	137.5	479.6
64	284.8	308.9	500.0	593.6	276.7	300.2	166.5	259.7	153.5	240.3	866.3
66	1149.5	1246.8	2000.0	2396.3	1141.5	1238.1	686.8	1040.2	633.2	959.8	3573.5

ROAD DIMENSIONS FOR WATERSHED MANAGEMENT



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
WH = TOT. WIDTH DISTURB. HOR.
WS = TOT. WIDTH DISTURB. SLOPE
LF = LENGTH OF FILL SLOPE
LC = LENGTH OF CUT SLOPE
C = CUT HEIGHT

ROAD DIMENSIONS FOR SLOPE STAKING AND END AREAS



SF = SLOPE DIST. TO TOE FILL
SC = SLOPE DIST. TO TOP CUT
C = CUT HEIGHT
HC = HOR. DIST. CUT STAKE TO CL.
F = FILL HEIGHT
HF = HOR. DIST. FILL STAKE TO CL.
A = END AREA OF CUT - SQ. FT.

Megahan, Walter F.
1976. Tables of geometry for low-standard roads for watershed management considerations, slope staking, and end areas. USDA For. Serv. Gen. Tech. Rep. INT-32, 104 p. Intermountain Forest and Range Experiment Station, Ogden, Utah 84401.

Tables provide various dimensions for low-standard roads built with a "balanced" construction technique. In addition to assisting in slope staking and in the determination of excavation volumes, the information offers a means of evaluating potential watershed impacts of road construction and aids in the planning of appropriate erosion-control measures. The material is applicable to both the road location and design phases of road construction.

OXFORD: 116; 116.5; 116.65; 383; 686.3
KEYWORDS: watershed management, road erosion, road construction, road prism, road design, erosion control, sedimentation

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